

Environmental Protection or Mineral Theft: Potential Application of the Fifth Amendment Takings Clause to U.S. Termination of Unpatented Mining Claims

Beckett G. Cantley*

Abstract

The mining claim patent process was much less rigorous in the early days of mining when nearly anyone willing to expend the \$500 on “patent improvements,” pay for a mineral survey, and pay the statutory purchase price could patent a mining claim very easily. Over time, the United States government has grown increasingly reluctant to patent mining claims and to allow mining activities to occur on unpatented federal public domain lands. The U.S. government argues that its reluctance to allow mining is simply an environmental concern. However, the U.S. tightening of private mining upon federal lands also coincides with a period of significantly rising mineral values. In the early 1990s, the U.S. government used delay tactics in the patent application process followed by an absolute moratorium on patent application approvals in the mid-1990s. The U.S. began gradually imposing arguably-excessive occupancy and environmental regulations around this time as well, increasing the cost of mining operations significantly. In the early 2000s the U.S. began utilizing a dormant trap in the General Mining Act—a combination of valuable discovery, use, and mine-to-mill site provisions—to retroactively invalidate most of the remaining unpatented mining claims as untenable under the Marketability Test. The U.S. also sought to prevent relocation of such retroactively invalidated claims by currently withdrawing federal lands as national monuments under the Antiquities Act. Claimholders who feel that their claims have been wrongly invalidated and/or denied patenting have looked for redress often by arguing that the government’s actions are unconstitutional. An argument that is more likely to be successful, however, is that the invalidation and withdrawal of an otherwise valid, unpatented mining claim may constitute a compensable Fifth Amendment taking by the

* Beckett G. Cantley (University of California, Berkeley, B.A. 1989, Southwestern University School of Law, J.D. cum laude, 1995; and University of Florida, College of Law, LL.M. in Taxation, 1997) is an Associate Professor of Law at Atlanta’s John Marshall Law School. The author can be reached for comment at (404) 502-6716 or at bcantley@johnmarshall.edu. Prof. Cantley would like to thank Matthew Abernethy for his work as a research assistant on this article.

U.S. government. This article discusses: (1) an overview of the laws governing U.S. mining claims; (2) the process of locating and maintaining an unpatented claim; (3) the process and requirements of claim patenting; (4) the relative benefits of patenting; (5) the federal land withdrawal power under the Antiquities Act; (6) how the a Fifth Amendment takings argument may arise from increased regulatory compliance costs; (7) how a Fifth Amendment takings argument may arise from federal land withdrawals of otherwise valid unpatented mining claims; (8) procedures for litigating mining claim contests; and (9) issues related to a former unpatented claimholder's standing to sue or intervene in a mining claim contest.

Table of Contents

I. Introduction.....	206
II. Background on Mining Claims.....	208
A. Brief History of the Sources of Mining Claims Law	208
B. Types of Mining Claims.....	209
1. Lode Claims.....	210
2. Placer Claims.....	211
3. Mill Site Claims.....	212
4. Tunnel Claims.....	212
C. Lands Open to Location of Mining Claims and Discoverable Minerals	212
III. Locating and Validating an Unpatented Mining Claim.....	215
A. Federal Requirements in General.....	215
1. Actual Discovery Requirement	216
2. Present Valuable Discovery Requirement	218
a. Prudent Man Test	219
b. Marketability Test	220
B. Specific Problems in Maintaining Unpatented Mining Claims Prior to Discovery for Value.....	222
C. Specific Problems in Avoiding Abandonment of Unpatented Mining Claims	223
1. Annual Assessment Fees or Labor	225
D. Bureau of Land Management Contests in General	227
1. Bureau of Land Management Environmental Regulation Contests	228
2. Bureau of Land Management Occupancy Regulation Contests	231
IV. Patented Mining Claims.....	234
A. In General.....	234
B. The Traditional Process and Requirements of Obtaining a Patented Mining Claim	235
1. Process.....	235

2. Requirements.....	236
a. Discovery of Valuable, Locatable Minerals.....	236
b. Mineral Survey.....	237
c. Application and Publication.....	237
d. Field Inspection.....	238
e. Compliance with the Multiple Use Act.....	238
f. Payment of Statutory Purchase Price per Acre.....	238
C. Government Trend Against Patenting.....	239
D. Patenting as a Vested Property Right.....	240
E. A Limited Alternative to the Traditional Patenting Process.....	242
F. Mineral Patent Adjudication in General.....	243
V. A Trap for the Unwary in Relation to Validating Unpatented Mining Claims and Exercising Vested Rights in Claims Thought to be Ripe for Patent.....	243
A. Valuable Discovery Requirement.....	244
B. Use Limitations.....	245
C. The Mine-to-Mill Site Ratio.....	245
D. Combined Effects of the Valuable Discovery Requirement, Use Limitation, and Mine-to-Mill Site Ratio As They Relate to Modern Mining Practice.....	246
E. Limited Loophole to Enforcement of the Valuable Discovery, Use, and Mine-to-Mill Site Provisions.....	247
1. Potential Problems Involved With Strategies Limiting the Acreage of Lode and/or Placer Claims.....	248
VI. Constitutionality of the Antiquities Act.....	250
A. Antiquities Act Use Against Unpatented Mining Claims.....	250
B. Facial and As Applied Unconstitutionality Arguments.....	252
VII. Fifth Amendment Takings.....	255
A. In General.....	255
1. Actual Taking.....	255
2. Regulatory Taking.....	256
3. Just Compensation.....	257
B. Mining Claim Taking Issues.....	258
1. Patented Mining Claims.....	258
2. Valid Unpatented Mining Claims.....	259
VIII. Procedures for Litigating Mining Claims Taking Issues.....	264
A. Filing Non-Existing Case.....	265
B. Intervention in Existing Cases.....	267
1. Timeliness.....	268
2. Sufficient Interest of Intervenor.....	269
3. Potential to Impair Interest of Intervenor.....	270
4. Adequacy of Representation of Intervenor by Existing Parties.....	271

IX. The Government's Constitutional Standing Defense to an Unpatented Mining Claim Takings Action.....	272
A. Requirements	272
1. Actual or Threatened Injury (Injury in Fact)	272
2. Causation	273
3. Redressability	273
X. Conclusion.....	274

I. Introduction

The mining claim patent process was much less rigorous in the early days of mining when nearly anyone willing to expend the \$500 on “patent improvements,” to pay for a mineral survey, and to pay the statutory purchase price could patent a mining claim very easily.¹ Thus, “the [General Mining Act] ha[d] traditionally been interpreted as granting miners a near-carte blanche right to develop federal lands for mining.”² Over time, the federal government has grown increasingly reluctant to patent claims and to allow mining activities to occur on unpatented federal public domain lands.³ The U.S. government argues that its reluctance to allow mining is simply an environmental concern.⁴ However, the U.S. tightening of private mining upon federal lands also coincides with a period of significantly rising mineral values.⁵ In the early 1990s, the U.S. government used delay tactics in the patent application process,⁶ followed by an absolute moratorium on patent application approvals in the mid-

1. See ROCKY MOUNTAIN MINERAL LAW FOUND., AM. LAW OF MINING § 51.05 (2d ed. 1999) [hereinafter ROCKY MOUNTAIN MINERAL LAW FOUND.] (noting the investment required to patent a claim).

2. Nicole Rinke, *The Crown Jewel Decision: Recognizing the Mining Law's Inherent Limits*, 27 Ecology L.Q. 819, 819 (2000) [hereinafter *Crown Jewel*].

3. See ROBERT G. PRUITT, ROCKY MOUNTAIN MINERAL LAW FOUND., DIGEST OF MINING CLAIM LAWS 2 (5th ed. 1981) [hereinafter PRUITT] (noting the increased regulation of mining claims).

4. The EPA has reported that more than 40 percent of Western watersheds have mining contamination in their headwaters. The total cost of cleaning up metal mining sites throughout the West is an estimated \$32 billion or more. See *Oversight Hearing on Hardrock Mining on Fed. Land Before the Senate Comm. on Energy and Natural Res.*, 110th Cong. 9 (2007) (statement of Dusty Horwitt, J.D., Pub. Lands Analyst, Env'tl. Working Grp.).

5. Since 2005, the price of gold has more than tripled. See NAT'L MINING ASSOC., *Historical Gold Prices: 1833 to Present*, available at http://www.nma.org/pdf/gold/his_gold_prices.pdf. [hereinafter *Historical Gold Prices*]; Tatyana Shumsky, *Precious Metals: Gold Rebounds Alongside Euro, Remains Below \$1600*, WALL ST. J. (Dec. 15, 2011), available at <http://online.wsj.com/article/BT-CO-20111215-709067.html>.

6. See George Cameron Coggins & Robert L. Glicksman, *Patenting*, 4 PUB. NAT. RESOURCES L. § 42:24 (2d ed.) [hereinafter *Patenting*] (discussing the burdens of the patenting process); see *Independence Mining Co. v. Babbit*, 885 F. Supp. 1356, 1363 (D. Nev. 1995) (noting changes in BLM policy that have resulted in delay of patent approval).

1990s.⁷ The U.S. began gradually imposing, arguably excessive, occupancy and environmental regulations around this time as well, increasing the cost of mining operations significantly.⁸ In the early 2000s the U.S. began utilizing a dormant trap in the General Mining Act—a combination of valuable discovery, use, and mine-to-mill site provisions—to retroactively invalidate most of the remaining unpatented mining claims as untenable under the Marketability Test.⁹ The U.S. also sought to prevent relocation of such retroactively invalidated claims by withdrawing federal lands as national monuments under the Antiquities Act.¹⁰ Each of these recent government actions will be discussed in much greater detail below.

Claimholders who feel that their claims have been wrongly invalidated and/or denied patenting have looked for redress in the courts, many times by arguing that the government's actions are unconstitutional. The argument that is most likely to be successful, and the focus of this article, is that the invalidation and withdrawal of an otherwise valid unpatented mining claim may constitute a compensable Fifth Amendment taking by the U.S. government. This article will: (1) provide background on federal mining claims; (2) discuss the process of locating and maintaining an unpatented claim; (3) describe the process and requirements of claim patenting; (4) discuss the relative benefits of patenting; (5) outline the federal land withdrawal power under the Antiquities Act; (6) discuss how the a Fifth Amendment takings argument may arise from increased regulatory compliance costs; (7) discuss how a Fifth Amendment takings argument may arise from federal land withdrawals of otherwise valid unpatented mining claims; (8) describe the procedures for litigating mining claim contests; and (9) outline issues a former unpatented claimholder may have in establishing standing to sue or intervene in a mining claim contest.

7. See Bureau of Land Mgmt., *Patenting a Mining Claim*, DEP'T OF THE INTERIOR, http://www.blm.gov/wy/st/en/programs/mineral_resources/Mining_Claims/patenting.html (last visited Feb. 10, 2013) [hereinafter *Mining Claim*] (“[A]ll mineral patent applications received after October 1, 1994 . . . are to be returned to the applicant without further action.”) (on file with the Washington and Lee Journal of Energy, Climate, and the Environment).

8. See 30 U.S.C. § 612 (1955) (creating restrictions on the removal of vegetation by prospectors); see 43 C.F.R. § 3715 (1996) (detailing BLM use and occupancy requirements).

9. See *Crown Jewel*, *supra* note 2, at 825 (discussing the cumulative effect of different elements of the Mining Law on certain ore bodies on federal lands).

10. American Antiquities Act of 1906, 16 U.S.C. §§ 431–33 (1906).

II. Background on Mining Claims

A. Brief History of the Sources of Mining Claims Law

The current U.S. mining claim law framework started as a series of customary local rules, evolving over time to the detailed federal and state system in place today. Early prospectors adopted their own rules for locating and maintaining mining claims.¹¹ These informal rules forged local customs, which were enforced by organized mining districts in some areas.¹² This unregulated system worked for some time. Eventually, however, the unbridled mayhem of the California Gold Rush of 1849 created the necessity for a federal mining claims system,¹³ leading to the enactment of the General Mining Act of 1872 (“General Mining Act”).¹⁴

The General Mining Act was the first United States federal law to authorize and govern prospecting and mining for economic minerals on federal public lands.¹⁵ While the General Mining Act was the first direct federal authorization of permissible mining on federal lands, the terms of the General Mining Act were heavily influenced by the majority opinion of various early local mining customs (as were many early court decisions interpreting the General Mining Act).¹⁶ Under the terms of the General Mining Act as originally enacted, all United States citizens eighteen years of age or older had the right to locate a mining claim.¹⁷ The General Mining Act distinguished between the rights and requirements of lode (i.e. hard rock) and placer (i.e. gravel) mining claims (discussed in greater detail immediately below).¹⁸ The General Mining Act authorized unpatented mining claims, which only grant claimholders the right to conduct activities necessary to exploration and mining, so long as the claimholder diligently works the claim and makes at least \$100 worth of annual labor improvements.¹⁹ The General Mining Act also authorized the granting, upon the claimholder’s application, of patented mining claims, which

11. See PRUITT, *supra* note 3, at 1 (discussing early mining in the U.S.).

12. See PRUITT, *supra* note 3, at 1 (noting the use of local custom in early mining).

13. See PRUITT, *supra* note 3, at 1 (“The mining claim was born of necessity out of the California Gold Rush of 1849 and other mining booms during the Civil War.”).

14. General Mining Act of 1872, ch. 152, 17 Stat. 91 (1872), *amended by* Mining and Minerals Policy Act of 1970, Pub. L. No. 91-631, 84 Stat. 1876 (codified as amended at 30 U.S.C. §§ 21–54 (1994)).

15. See *generally id.* (granting rights to existing and future mining claims).

16. See *id.* §§ 22, 28 (providing that locatable federal public domain lands shall be free and open to exploration and purchase under regulations prescribed by law, “and according to the local customs or rules of miners in the several mining districts, so far as the same are applicable and not inconsistent with the laws of the United States.”).

17. See *id.* § 22 (discussing citizenship requirements).

18. See *id.* § 35 (recognizing a difference between lode and placer).

19. See *id.* §§ 28, 28-1, 28b (discussing the limits of unpatented claims).

granted the claimholder exclusive use and title to previously federally-owned lands upon which an unpatented mining claim was validly located and maintained with at least \$500 of claim improvements and expenditures made thereon.²⁰

Following the enactment of the General Mining Act, most Western states enacted supplemental state laws that assist in determining: (1) the manner for monumenting claim boundaries; (2) the amount and type of discovery work required at the time of locating a claim; (3) the recording requirements of notices of location; and (4) the documentation requirements of annual assessment labor.²¹ The Federal Land Policy and Management Act of 1976 provided the foundation for extensive federal regulation in the field of mining claims.²² As a result, U.S. federal regulations are now very relevant authority pertaining to mining claims issues.²³ For instance, federal regulations require that all mining claims be properly filed and maintained with annual filings with the Bureau of Land Management (“BLM”).²⁴ This patchwork of federal and state mining claims laws affect specific types of mining claims in different ways, which is a topic addressed immediately below.

B. Types of Mining Claims

Federal and state mining laws and regulations differ depending on the type of mining claim involved. There are four types of mining claims: (1) lode; (2) placer; (3) mill site; and (4) tunnel.²⁵ The form of the deposit (and not whether the deposit contains a metal or nonmetal, contrary to popular belief) determines the nature of the claim.²⁶ Each type of claim is a distinct and separate entity, having different purposes and holding individualized property interests.²⁷ However, multiple types of claim filings

20. See *id.* § 29 (discussing the procurement of a patent).

21. See PRUITT, *supra* note 3, at 35–154 (indicating differences and other information about state mining laws).

22. Federal Land Policy and Management Act, 43 U.S.C. §§ 1701–84 (1976).

23. See *id.* (creating formal regulations of mining).

24. Compliance with the filing requirement regulations is relatively difficult and costly. Furthermore, failure to strictly comply has been ruled to completely void previously located mining claims, with relocation as the only solution available to regain the claim rights. See *id.* § 1744 (discussing filing requirements); see PRUITT, *supra* note 3, at 2 (discussing the need to file annually with BLM).

25. See Bureau of Land Mgmt., *Types of Claims and Sites*, DEP’T OF THE INTERIOR, http://www.blm.gov/nv/st/en/prog/more_programs/geographic_sciences/mineral_surveyor_program/types_of_claims.print.html (last visited Feb. 9, 2013) [hereinafter *Types of Claims*] (on file with the Washington and Lee Journal of Energy, Climate, and the Environment).

26. See PRUITT, *supra* note 3, at 2 (discussing the types of deposits).

27. See PRUITT, *supra* note 3, at 2 (noting the different effects of various types of claims).

are commonly made upon a single geographic area.²⁸ For instance, mineral deposits are located either by lode or placer claims.²⁹ In cases where the nature of the deposit is questionable, prudent locators would file doubly on the same ground,³⁰ first as a placer claim then as a lode claim because Congress recognized lodes within placers, but not vice versa.³¹ The remainder of this subsection will discuss the four types of mining claims in greater detail.

1. Lode Claims

The General Mining Act requires a lode claim for “veins or lodes of quartz or other rock in place.”³² In fact, a lode claim cannot be issued until a vein or lode has been discovered on the land.³³ Therefore, lode claims are generally only validly locatable upon a mineral deposit that is surrounded by hard rock.³⁴ Any vein, lode, zone, or belt of mineralized rock lying between boundaries that separate the deposit from the neighboring rock, even if these boundaries are gradational, should be located as a lode claim.³⁵ Examples of mineralized rock deposits that could be subject to a lode claim include vein and fissure deposits of gold, platinum, silver, copper, lead, zinc, uranium, and tungsten.³⁶ Federal law limits the size of a single lode claim to 1500 feet in length and not more than 300 feet on either side of the centerline of the deposit—amounting to a total area of 10.331

28. See PRUITT, *supra* note 3, at 3 (noting that, for instance, a tunnel claim can give rise to a lode claim).

29. See *generally* 43 C.F.R. § 3832 (2003) (discussing the process of locating mine claims).

30. See ROCKY MOUNTAIN MINERAL LAW FOUND., *supra* note 1, at § 32.02(4)(b) (discussing the problems with determining the form of a deposit at a given location); see H. Michael Keller, *Lode or Placer?—Locating the Distinction*, 31 ROCKY MOUNTAIN MINERAL LAW INST. 12-1, 12-42 (1985) (discussing the advantages of double-staking, and the “placer first” rule); A lode claim is void if used to acquire a placer deposit, and a placer claim is void if used for a lode deposit. See PRUITT, *supra* note 3, at 13 (noting that the claim must be surveyed unless it is a placer claim located in accordance with surveyed legal subdivisions).

31. See 30 U.S.C. § 37 (1994) (describing the hierarchy of claims).

32. 43 C.F.R. § 3832.21 (2003); see 30 U.S.C. § 26 (2006) (noting the requirement of a lode claim for rock in place).

33. See 43 C.F.R. § 3832.11 (2003) (outlining the process of establishing a mining claim).

34. See *Types of Claims*, *supra* note 25 (noting “deposits subject to lode claims include classic veins or lodes having well-defined boundaries.”).

35. See *Types of Claims*, *supra* note 25 (“They also include other rock in-place bearing valuable minerals and may be broad zones of mineralized rock.”).

36. See *Types of Claims*, *supra* note 25 (stating that examples of lode claims “include quartz or other veins bearing gold or other metallic minerals and large volume, but low-grade disseminated gold deposits”).

acres.³⁷ However, there are no restrictions on how deep a miner can dig within a lode claim site, i.e. no restrictions on “extra-lateral rights.”³⁸

2. Placer Claims

Placer claims are defined as “including all forms of deposit, excepting veins of quartz, or other rock in-place.”³⁹ In other words, “every deposit, not located with a lode claim, should be appropriated by a placer location.”⁴⁰ Originally, these included only loose deposits of unconsolidated materials, such as sand and gravel, containing free particles of gold (nuggets) or other minerals.⁴¹ However, many nonmetallic bedded or layered deposits, such as gypsum and high calcium limestone, were also made locatable as placer deposits by Congressional acts and judicial interpretations.⁴² Exterior dimensions of placer mining claims are generally expected to conform to subdivisions of the section survey.⁴³ A single locator may not claim more than 20 acres in each placer claim.⁴⁴ However, a claimholder must prove that each ten acres within a placer claim is mineral in character to show the existence of a valid discovery on the entire claim.⁴⁵ Placer claims do not enjoy extra-lateral rights.⁴⁶

37. See *Types of Claims*, *supra* note 25 (noting that Federal statute limits a lode claim “to a maximum of 1500 feet in length, and a maximum width of 600 feet (300 feet on either side of the vein)”).

38. See 30 U.S.C. § 26 (2006) (describing how the right of possession includes both the enjoyment of “all the surface included within the lines of their locations, and of all veins, lodes, and ledges throughout their entire depth, the top or apex of which lies inside of such surface lines extended downward vertically”).

39. *Id.* § 35; see also *Types of Claims*, *supra* note 25.

40. *Types of Claims*, *supra* note 25.

41. See PRUITT, *supra* note 3, at 2 (stating that these claims can be located “upon deposits of loose, unconsolidated material, such as gravel beds”).

42. See PRUITT, *supra* note 3, at 3 (noting that deposits of “gypsum, limestone and quarry stone are most commonly located as placer claims”).

43. See *Types of Claims*, *supra* note 25 (stating that, where practicable, placer claims are located by legal subdivision).

44. See *Types of Claims*, *supra* note 25 (explaining that different acreage rules apply to associations of persons that act as a single locator, but corporations may not join associations and are limited to twenty acres).

45. See *Am. Smelting & Ref. Co.*, 39 Pub. Lands Dec. 299, 301 (1910) (“A single placer discovery does not impress the entire area that may be embraced within the location with a placer character, if it be shown as a matter of fact that a definite portion thereof is nonplacer.”).

46. See 30 U.S.C.A. § 26 (2006) (noting that the statute discusses extra-lateral rights in relation to veins, lodes, and ledges without mentioning placer claims); see also *Swoboda v. Pala Mining Inc.*, 844 F.2d 654, 656 (9th Cir. 1988).

3. Mill Site Claims

Mill site claims may be located upon non-mineral rich ground for the purpose of erecting facilities for milling, smelting, and processing minerals, and are limited to five acres in total area, per corresponding lode or placer claim.⁴⁷

4. Tunnel Claims

A tunnel site claim is valid from the tunnel entrance for 3000 feet along the tunnel's projected course and up to 1500 feet on either side of the projected tunnel's centerline.⁴⁸ A buried lode claim may be located upon discovery from a tunnel claim.⁴⁹ A tunnel site claim is maintained through active work on the tunnel at least every six months.⁵⁰ However, tunnel site claims are rarely used today due to the relative economic inefficiency of tunneling exploration activities in comparison to drilling activities.⁵¹

Along with noting how the type of potential claim is determined, it is necessary to determine if the federal land the claim resides on is open to private mining claims. Below is a brief discussion of this issue.

C. Lands Open to Location of Mining Claims and Discoverable Minerals

Regardless of the claim type, the General Mining Act⁵² (and its judicial progeny) only opens certain federal lands to locating mining claims and considers only certain substance deposits locatable. The General Mining Act initially granted free access to individuals and corporations to prospect for minerals in public domain lands and allowed them, upon

47. See *Types of Claims*, *supra* note 25.

48. See *Types of Claims*, *supra* note 25 (explaining that the maximum distance lode claims may exist is "1,500 feet on either side of the centerline of the tunnel" which gives the mining claimant the right to prospect an area 3,000 feet wide and 3,000 feet long").

49. See PRUITT, *supra* note 3, at 3 ("If a buried vein or lode deposit is discovered in the tunnel, the owner may locate conventional lode mining claims to acquire the deposit.").

50. See PRUITT, *supra* note 3, at 3.

51. See PRUITT, *supra* note 3, at 3 (noting that the Tunnel Site claim is not often used today because "of the economics of driving a tunnel versus drill or other methods of exploration").

52. See Marc Humphries, *Mining on Federal Lands*, CONG. RESEARCH SERV. (Jun. 11, 2002) <http://www.cnie.org/nle/crsreports/mining/mine-1.pdf> [hereinafter *Federal Lands*] (the General Mining Act is one of the major statutes directing federal land management policy) (on file with the Washington and Lee Journal of Energy, Climate, and the Environment); see also *Crown Jewel*, *supra* note 2, at 820–21 (2000) (noting that the General Mining Act was passed in the spirit of manifest destiny and generally encouraged the settlement and development of the West).

making a discovery, to locate a claim on that deposit.⁵³ However, through a historical process of elimination,⁵⁴ only rare or “distinct” and “valuable”⁵⁵ hard rock mineral⁵⁶ allocations are currently locatable.⁵⁷ Furthermore, only open, un-appropriated federal public domain lands⁵⁸ may have mining claims located upon them.⁵⁹ Privately owned “patented” lands, previously located unpatented lands, and state-owned lands are currently not subject to location of mining claims.⁶⁰ However, most lands subject to regulation by the BLM⁶¹ and the U.S. Forest Service are claimable, unless such lands are withdrawn,⁶² are classified against mining, or are considered “acquired lands”.⁶³

53. See *Federal Lands*, *supra* note 52, at 1 (“The Mining Law granted free access to individuals and corporations to prospect for minerals on open public domain lands, and allowed them, upon making a discovery, to stake (or ‘locate’) a claim on the deposit.”).

54. See Common Varieties Act of 1955, 30 U.S.C.A. § 611 (2006) (noting that the Common Varieties Act declares that petrified wood and common minerals of widespread occurrence, except those with “distinct and special” values, shall be sold, not located).

55. *Id.*; see also 30 U.S.C. § 22 (2000) (noting that the General Mining Act provided that “all valuable mineral deposits in lands belonging to the United States, both surveyed and unsurveyed, shall be free and open to exploration and purchase, and the lands in which they are found to occupation and purchase).

56. See 44 DECISIONS OF THE DEPARTMENT OF THE INTERIOR IN CASES RELATING TO THE PUBLIC LANDS 326 (George J. Hesselman ed.) (1916) (explaining that the mineral character of the deposit is “established when it is shown to have upon or within it such a substance as a) is recognized as mineral, according to its chemical composition, by the standard authorities on the subject; or b) is classified as a mineral product in trade or commerce”).

57. See generally 30 U.S.C.A. §§ 22–47 (2006); see PRUITT, *supra* note 3, at 17 (describing that “common variety” of certain rock namely sand, gravel, and stone were not subject to the mining laws and only valuable mineral deposits are subject to mining laws).

58. See Bureau of Land Mgmt., *Where Can a Claim be Located?*, DEP’T OF THE INTERIOR, http://www.blm.gov/wy/st/en/programs/mineral_resources/Mining_Claims/where.html (last visited Feb. 8, 2013) [hereinafter *Where Can a Claim be Located?*] (noting that federally administered land, upon which mining claims may be located, currently exists in nineteen states: Alaska, Arizona, Arkansas, California, Colorado, Florida, Idaho, Louisiana, Mississippi, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming) (on file with the Washington and Lee Journal of Energy, Climate, and Environment).

59. See *id.* (“Only public domain minerals are locatable minerals (those minerals that have never left federal ownership).”).

60. See PRUITT, *supra* note 3, at 6 (describing that only “open, unappropriated, federal ‘public domain’” is open to location for mining claims).

61. See *Where Can a Claim be Located?*, *supra* note 58 (explaining that the BLM manages the subsurface of all federal administered land, as well as the surface of all federally administered land other than National Forest System land).

62. See *Where Can a Claim be Located?*, *supra* note 58 (“Claims may not be located in areas closed to mineral entry by a special act of Congress, regulation, or public land order. These areas are said to be ‘withdrawn’ from mineral entry. Areas withdrawn from location of mining claims include: National Parks, National Monuments, Indian reservations, most reclamation projects under the Bureau of Reclamation, military reservations,” and

Upon making a discovery of a locatable and valuable mineral deposit on public lands, a prospector may locate an unpatented mining claim upon the land.⁶⁴ An unpatented mining claim grants a prospector-claimholder the exclusive right to mine the land and sell the minerals without charge, so long as the prospector-claimholder complies with federal and state mining laws and regulations.⁶⁵ Valid unpatented claims are real property interests,⁶⁶ good against the world, and vest equitable and possessory title in the claimholder.⁶⁷ While an unpatented claim gives the prospector-claimholder the right to develop the minerals, a prospector-claimholder may seek conveyance of full title to the surface land and subsurface mineral rights by successfully completing the federal mining claim patenting process.⁶⁸ Unpatented and patented mining claims are discussed in greater detail in Sections III and IV below, *infra*. The remainder of this Article, particularly the Fifth Amendment takings analysis, will only pertain to property interests that constitute either valid unpatented or patented mining claims.

unpatented claims that remain compliant with all federal and state mining laws and regulations).

63. 30 U.S.C.A. §§ 351–59 (2006) (noting that acquired lands are no longer subject to the General Mining Act, by an act of Congress in 1947, and are only subject to the law relating to easements and profits); *see Federal Lands*, *supra* note 52, at 1 (“‘Acquired’ lands [are] those obtained from a state or private owner through purchase, gift, or condemnation for particular federal purposes rather than as general territory of the United States are subject to easing only and are not covered by the 1872 Law” (General Mining Act)); *See also* PRUITT, *supra* note 3, at 6 (describing that despite certain exclusions, “most western public lands administered by the U.S. Bureau of Land Management and the U.S. Forest Service, unless such land is withdrawn or classified against mining location,” is open to location of mining claims).

64. *See Federal Lands*, *supra* note 52, at 2 (“After a prospector has conducted exploration work on public domain land, he or she may locate a claim to an area believe to contain a valuable mineral.”).

65. *See Federal Lands*, *supra* note 52, at 2 (“Mineral production can take place without a patent or revenue payments to the federal government.”).

66. *See* Independence Mining Co. v. Babbitt, 885 F. Supp. 1356, 1357 n.2 (D. Nev. 1995) (“Unpatented mining claims . . . are ‘real property in the fullest sense.’”).

67. *See id.* at 1366 (“Legal title to land remains in the United States, but claimants enjoy valid, equitable, possessory title, subject to taxation, transferable by deed or devise and otherwise possessing incidents of real property,” and the right to patent arises when the purchase price is paid); *see also* Collord v. U.S. Dep’t of Interior, 154 F.3d 933, 936 (9th Cir. 1998) (stating that even though the General Mining Law does not require formal hearings when the Interior Department contests a mining claim, the due process clause of the U.S. Constitution requires a hearing before a mining claimant’s property rights may be extinguished).

68. *See Federal Lands*, *supra* note 52, at 2 (“Once a claimed mineral deposit is determined to be economically recoverable, and at least \$500 of development work has been performed, the claim holder may file a patent application to obtain title to surface and mineral rights.”).

III. Locating and Validating an Unpatented Mining Claim

Upon making an actual discovery of a valuable mineral deposit on public lands,⁶⁹ a prospector may locate an unpatented mining claim upon the land.⁷⁰ An unpatented mining claim grants a prospector-claimholder the exclusive right to mine the land and sell the minerals without charge, so long as the prospector-claimholder complies with federal and state mining laws and regulations.⁷¹ Therefore, once a prospector-claimholder locates and validates an unpatented mining claim, federal regulation preventing the prospector-claimholder from exercising their exclusive right to mine could constitute a compensable Fifth Amendment Taking.⁷² The remainder of this Section III discusses the process for locating and validating unpatented mining claims as well as specific issues with maintaining an unpatented mining claim, avoiding abandonment, and BLM environmental and occupancy contests.

A. Federal Requirements in General

Federal regulations require that a conspicuous Notice of the mining claim be posted at the actual point of discovery in order for a location to be considered valid.⁷³ The Notice should contain: (1) the identity of the locator; (2) the name of the claim; (3) the date of location and/or discovery; and (4) a brief description of the claim boundaries or dimensions.⁷⁴ Federal law also requires that claim boundaries be distinctly and clearly marked and readily identifiable in order for a location to be considered valid.⁷⁵ However, nearly every state allows a single monument to mark the intersection of multiple claims.⁷⁶ State law would then determine: (1) how the claim

69. See 4 PEDIS POSSESSIO, PUB. NAT. RESOURCES L. § 42:9 (2d ed.) (explaining that until prospectors actually discover valuable deposits of qualifying minerals, they are only entitled, by virtue of the *pedis possessio* doctrine, to exclusive rights of surface occupation for mineral exploration purposes so long as their exploration is active).

70. See *Federal Lands*, *supra* note 52, at 2–5 (describing that a prospector may locate a claim to an area after exploration if it is believed to contain a valuable mineral).

71. See *Federal Lands*, *supra* note 52, at 2 (stating that a “patent is not necessary to develop the minerals within a claim”).

72. See *Federal Lands*, *supra* note 52, at 5 (“If discovery is made and a valid location established, the claimant has a valid possessory right against all other parties.”).

73. Lode Claims, 43 C.F.R. §§ 3841.4–5 (1970).

74. PRUITT, *supra* note 3, at 3.

75. U.S. Department of the Interior, Bureau of Land Management, *Staking a Claim*, http://www.blm.gov/wy/st/en/programs/mineral_resources/Mining_Claims/staking.html (last visited Feb. 10, 2013) [hereinafter *Staking A Claim*] (“Federal law specifies that claim boundaries must be distinctly and clearly marked to be readily identifiable.”) (on file with the Washington and Lee Journal of Energy, Climate, and the Environment).

76. PRUITT, *supra* note 3, at 5 (“A single monument may represent a common point for several adjoining claims.”).

boundaries must be monumented; (2) the required contents of the Location Certificate; (3) the relevant discovery work requirements; and (4) the relevant recording requirements.⁷⁷

The U.S. government can challenge unpatented mining claims as invalid. Typically the U.S. attacks such claims, where appropriate, by raising (1) the actual discovery requirement and/or (2) the present valuable discovery requirement. The next section of this article will discuss these two requirements.

1. Actual Discovery Requirement

The government often is successful in using the actual discovery requirement to challenge the validity of unpatented mining claims.⁷⁸ Historically, the courts and the Department of Interior have demanded that a claimholder actually uncover a deposit on each and every claim to acquire a right against the government⁷⁹ on such claims.⁸⁰ Therefore, for a lode claim to be valid, a vein or other mineralized body must generally be physically discovered on the claim.⁸¹ As noted above, the government has historically taken the stance that a valid discovery requires the actual physical disclosure of a locatable and valuable mineral deposit within the claim.⁸² Thus, a high probability of successfully discovering an actual deposit of valuable minerals is generally not a substitute for actual

77. See *Staking a Claim*, *supra* note 75 (describing how to properly stake a claim in keeping with both state and federal standards).

78. See *Crown Jewel*, *supra* note 2, at 822 (stating that two elements must be satisfied to establish a valid mineral claim—there must be an actual discovery and that discovery must be of a valuable mineral deposit).

79. See, e.g., *Berto v. Wilson*, 324 P.2d 843, 845–46 (Nev. 1958) (noting that a less stringent standard of actual discovery is applied in contests between rival locators).

80. See ROCKY MOUNTAIN MINING LAW INST., AM. L. OF MINING §§ 35.10, 35.11(3)(b)(iii) (2d ed. 1984) (noting that a mere possibility that a vein or lode exists, is not a sufficient basis for a valid claim, and that discovery requires something more); see Rodney D. Knutson & Harold G. Morris, Jr., *Locating, Maintaining, and Patenting Groups or Large Blocks of Mineral Claims*, 26 ROCKY MOUNTAIN MINING LAW INST. 517, 517–24 (1980) (describing how one locates, and establishes their claim); see E. Tintic Consol. Mining Claim, 40 Pub. Lands Dec. 271, 273 (1911) (establishing a valid discovery requires showing the place of discovery, when the discovery was made, the direction of the lode or vein; all such evidence should be clear and positive); see also George B. Reeves, *The Law of Discovery Since Coleman*, 21 ROCKY MOUNTAIN MINING LAW INST. 415, 425–26 (1976) (suggesting that it is necessary for the valuable mineral deposit itself to be exposed before one can claim a right against the government).

81. See *United States v. McKown*, 181 Interior Dec. 183, 196 (IBLA 2011) (“For a lode mining claim to be valid, ‘a vein or other mineralized ore body must be exposed’ on that claim.”).

82. See *Crown Jewel*, *supra* note 2 and accompanying text.

discovery of the deposit.⁸³ A geologic inference alone generally cannot be used to establish the existence of a mineral deposit necessary to make a valid location.⁸⁴

If the actual discovery requirement is strictly and narrowly interpreted as requiring an actual physical discovery of valuable mineral deposits, then an actual discovery may not be considered to be made until the mineral deposits are exploited and unearthed through actual mining operations.⁸⁵ However, some courts have validated the claimholder's ability to satisfy the actual physical discovery requirement by employing a geologist to analyze the subsurface mineral composition and to determine the costs of extraction and regulatory compliance.⁸⁶ These courts deem an actual physical discovery to have been made if the geologist determines that the mineral value exceeds these costs.⁸⁷

In addition to the actual discovery requirement, the government has also used the "present valuable discovery" requirement (as discussed in the next section of this article) to invalidate unpatented mining claims.⁸⁸

83. See *Barton v. Morton*, 498 F.2d 288, 291 (9th Cir. 1974) ("A reasonable prediction that valuable minerals exist at depth will not suffice as a 'discovery' where the existence of these minerals has not been physically established.").

84. See *Ernest K. Lehmann & Assoc.'s. of Montana, Inc. v. Salazar*, 602 F. Supp. 2d 146, 157 (D.D.C. 2009) ("Geologic inference may be used as a basis upon which to show the extent of a deposit to support a discovery under some circumstances. . . . Geologic inference, however, may not be used to show the existence of a mineral deposit in the first place, and only may be used to show its extent."); see also *Del Webb Conservation Holding Corp. v. Tolman*, 44 F. Supp. 2d 1105, 1110 (D. Nev. 1999) ("While it is well-established that geologic inference may be used to ascertain the quantity and quality of a known mineral deposit, it alone can never be used to establish the mineral deposit's existence.").

85. See *Barton v. Morton*, 498 F.2d 288, 291–92 (9th Cir. 1974) (noting that the true value of the mineral will remain uncertain until the deposit has been unearthed, and thus, actual discovery is required to determine whether the mineral deposit is valuable or not).

86. Federal agencies may also give weight to reasonable geological inferences in assessing value. See *Wilderness Soc'y v. Dombeck*, 168 F.3d 367, 376 (9th Cir. 1999). Where values have been high and relatively consistent, geologic inference could conceivably be used to demonstrate sufficient mineralization beyond the actual exposed areas. See *Moon Mining Co. v. Hecla Mining Co.*, 161 Interior Dec. 334, 341 (IBLA 2004). However, it should be noted that where only small quantities of minerals have been found, the likelihood that more minerals of the same quality exist within a claim will remain a matter for immense speculation. Geological inference may not be substituted for a showing of a valuable mineral deposit within the boundaries of each mining claim in question, or to establish that mineral values at depth are higher than those reflected in surface sampling. See *United States v. HMI Lenders, L.C.*, 179 Interior Dec. 117, 127 (IBLA 2010).

87. See *United States v. Coleman*, 390 U.S. 599, 602–03 (1968) ("Minerals which no prudent man will extract because there is no demand for them at a price higher than the costs of extraction and transportation of hardly economically valuable."); see also *United States v. Pittsburg Pac. Co.*, 84 Interior Dec. 282, 284 (IBLA 1997) (noting that to meet the "prudent man" test, it must be shown that the mineral can be extracted, removed and marketed at a profit).

88. See generally *Cameron v. United States*, 252 U.S. 450 (1919).

2. Present Valuable Discovery Requirement

The government often successfully uses the present valuable discovery requirement to challenge the validity of unpatented mining claims. An unpatented mining claim is conditional in nature.⁸⁹ An unpatented claimholder must both discover and maintain a “valuable mineral deposit,”⁹⁰ in order to acquire and retain property rights in the unpatented claim.⁹¹ Therefore, an unpatented claimholder risks losing the claim where the minerals deposited in the claim are not continually considered valuable—the claim may be lost anytime the cost-profit analysis of a mining operation tips away from marketability.⁹²

To establish the presence of value, an unpatented claimholder must reliably show that the mineral deposit is more valuable than the objectively anticipated costs of extraction, transportation, marketing/sales, and regulatory compliance.⁹³ A depressed or booming mineral market can greatly affect the rights of an unpatented mining claimholder as well as the government interest in reacquiring unencumbered federal title to the land where unpatented mining claims rest.⁹⁴ An unpatented mining claim may be invalidated at any point that the minerals are no longer considered valuable, either due to a depressed mineral market or increased extraction and/or regulatory compliance costs.⁹⁵ The Bureau of Land Management generally

89. See 30 U.S.C. § 22 (2006) (establishing that a valid claim is conditioned on the deposit being composed of “valuable minerals.”); see also *Cameron*, 252 U.S. at 459 (stating that an unpatented claimholder must demonstrate that his claim for a mining location meets certain standards).

90. The term “valuable mineral deposit,” as used in 30 U.S.C. § 22, is not defined and is fairly vague and subjective. It remains unclear what “valuable mineral deposit” actually means in the context of unpatented mining claims. However, a validity determination generally considers whether there is a reasonable expectation of success in developing a paying mine.

91. See 30 U.S.C. § 22 (2006) (describing a citizen’s rights to explore and purchase lands containing valuable mineral deposits); see also *Cameron*, 252 U.S. at 460 (explaining that, in order for an unpatented claimholder to assert a claim, they must meet the standards for having a valid claim under the statute).

92. See *Coleman*, 390 U.S. at 602 (noting that costs of mineral extraction and transportation may weigh in favor of not recognizing the claim).

93. See *United States v. Pittsburg Pac. Co.*, 84 Interior Dec. 282, 283 (IBLA 1977) (“A mining claimant must prove a discovery under the prudent man test, including that the mineral can be extracted, removed and marketed at a profit.”); see also *Lara v. Sec’y of the Interior*, 820 F.2d 1535, 1540 (9th Cir. 1987) (establishing that the claimant has the burden to show that the land contained minerals of “such quality and quantity as would render their extraction profitable”).

94. See *United States v. Garcia*, 161 Interior Dec. 235, 258 (IBLA 2004) (concluding that, after assessing all the costs, it was not a valuable mineral deposit).

95. See generally *United States v. Garcia*, 161 Interior Dec. 235 (IBLA 2004); *Clouser v. Espy*, 42 F.3d 1522, 1530 (9th Cir. 1994); *United States v. Pittsburg Pac. Co.*, 84 Interior Dec. 282, 285 (IBLA 1977).

tests the validity and value of a mineral discovery as of the date the lands were withdrawn from appropriation under the mining laws and at the time of the examination.⁹⁶ Subsequent examinations typically occur at the time of patent application and/or patent decision appeal, and each examination would require a separate valuation of the minerals.⁹⁷

The process of patenting an unpatented mining claim requires a finding of a “valuable deposit”⁹⁸ which is tested primarily using two distinct tests—the “Prudent Man Test” and the “Marketability Test”⁹⁹ (both discussed immediately below). For purposes of analyzing the validity of an unpatented mining claim, the term “valuable mineral deposit,” under 30 U.S.C. § 22, may be interpreted under substantially similar tests because successful completion of the patenting process would close off any future government attempts to challenge the value (and thus validity) of the unpatented claim.

a. Prudent Man Test

In 1894, the Department of Interior created the Prudent Man Test as an alternative definition of “value,” which was necessary to meet the present valuable discovery requirement to validly locate and maintain an unpatented mining claim.¹⁰⁰ Under the Prudent Man Test, a mining claim must be of such character that “a person of ordinary prudence would be justified in the further expenditure of his labor and means, with a reasonable prospect of success, in developing a valuable [paying] mine.”¹⁰¹ Minerals that no prudent man would extract (e.g. when there is no demand for them due to low grade or limited use) are not economically valuable.¹⁰² However, under the Prudent Man Test, the claimholder need not show

96. See 43 C.F.R. § 6304.12 (2013) (“BLM will conduct a mineral examination to determine whether your claim or site was valid as of the date that lands within the wilderness area were withdrawn from appropriation under the mining laws.”).

97. See *id.* (describing the examination process).

98. See 30 U.S.C. § 29 (2006) (inferring from the language of the statute that, for a patent to be granted, the discovered mineral deposit must be valuable).

99. See *Castle v Womble*, 19 Pub. Lands. Dec. 455, 455 (1894) (establishing the “prudent man test”); *United States v. Coleman*, 390 U.S. 599, 601–03 (1968) (describing the standards of both the “prudent man test” and the “marketability test”); *Converse v. Udall*, 399 F.2d 616, 620–23 (9th Cir. 1968) (discussing in detail the application of the “prudent man test” and the “marketability test”).

100. See *Castle*, 19 Pub. Lands. Dec. at 455 (“A mineral discovery, sufficient to warrant the location of a mining claim, may be regarded as proven, where mineral is found, and the evidence shows that a person of ordinary prudence would be justified in the further expenditure of his labor and means, with a reasonable prospect of success in developing a valuable mine.”).

101. See *Castle*, 19 Pub. Lands. Dec. at 455 (applying the test to demonstrate when a mineral discovery would not warrant the location of a mining claim).

102. See *Castle*, 19 Pub. Lands. Dec. at 455 (same).

value by proving an ability to mine the deposit for a profit.¹⁰³ The question under the Prudent Man Test is not whether profits are assured but rather whether a person of ordinary prudence would expend substantial sums in the expectation that a profitable mine might be developed.¹⁰⁴ The secondary test to the Prudent Man Test is the Marketability Test, discussed below.

b. Marketability Test

The Marketability Test was established in 1933 as a corollary to the Prudent Man Test.¹⁰⁵ The Marketability Test presupposes the established existence of a mineral deposit.¹⁰⁶ This test also requires a reasonable possibility that the commercial value of the deposit will exceed the cost of extracting, processing, transporting, and marketing the discovered mineral in order for the present valuable discovery requirement to be met.¹⁰⁷ Obviously, the profit calculation is a moving target because the price for the mineral and the costs of extracting it constantly fluctuate. Furthermore, the reasonable possibility of profit must be evidenced throughout the life of the unpatented claim, in order for the unpatented claim to be validly located and maintained. Nevertheless, the profit calculation is generally only conducted at the time of location, at the time of a government challenge to an unpatented claim's validity, and/or at the time of patent application. At the time of examination, claimholders cannot rely on speculation about future requirements, prices, and costs.¹⁰⁸

103. See *Coleman v. United States*, 363 F.2d 190, 199 (9th Cir. 1966) (“Since *Castle v. Womble* . . . the basic, judicially approved, standard of discovery of a valuable mineral requires proof that a person of ordinary prudence would be justified in further expenditure of his labor and means . . . but value, in the sense or proved ability to mine the deposit at a profit need not be shown.”).

104. See *Barton v. Morton*, 498 F.2d 288, 289 (9th Cir. 1974) (“The question is not ‘whether assured profits were presently demonstrated,’ but whether, under the circumstances, a person of ordinary prudence would expend substantial sums in the expectation that a profitable mine might be developed.”).

105. See *Coleman*, 363 F.2d at 201 (noting that the Marketability Test was first conducted in an earlier Interior Department decision, as an alternative to the *Castle v. Womble* test).

106. See *United States v. Garcia*, 161 Interior Dec. 235, 243 (IBLA 2004) (“Application of this test presupposes the established existence of a mineral deposit . . .”).

107. See *id.* (“[R]equires a showing that the evidence is of such a character that there is a reasonable prospect that the commercial value of the deposit will exceed the cost of extracting, processing, transporting, and marketing the contained mineral.”).

108. See *ROCKY MOUNTAIN MINING LAW INST., AM. LAW OF MINING* § 35.12(4) (2d ed. 1984) (describing the marketability rule and the necessity that there be a market for the mineral); see also *Husman v. United States*, 616 F. Supp. 344, 347 (D. Wyo. 1985) (“Locations based on speculation that there may at some future date be a market for the discovered material cannot be sustained.”).

The Marketability Test has been the main test of value employed in cases involving nonmetallic minerals of widespread occurrence, but this test may also apply to rare and valuable deposits.¹⁰⁹ Low-grade or low-demand minerals, whose raw material values are exceeded by the costs of extraction and transportation, are hardly economically valuable.¹¹⁰ Contrarily, high grade and high-demand deposits, such as gold, are very likely to be found to be economically valuable under the Marketability Test.¹¹¹ The Marketability Test has the advantage of analyzing a prospector's intent—a matter inextricably tied to value.¹¹² For instance, evidence that a mineral deposit likely cannot be operated at a profit may well suggest that a prospector seeks the land for other purposes.

Although the locator has the ultimate burden of persuasion, the government must first make a prima facie showing of invalidity under the Marketability Test before refusing a patent or refusing to acknowledge the existence of an unpatented claim for lacking present value.¹¹³ Uncontradicted evidence of the absence of production from a mining claim over a period of years is usually sufficient to establish a prima facie case of invalidity.¹¹⁴ However, the presumption established by the claimholder's long-time failure to develop the mine could be overcome by evidence of

109. See *United States v. Coleman*, 390 U.S. 599, 603 (1968) (“While it is true that the marketability test is usually the critical factor in cases involving nonmetallic minerals of widespread occurrence, this is accounted for by the perfectly natural reason that precious metals which are in small supply and for which there is a great demand, sell at a price so high as to leave little room for doubt that they can be extracted and marketed at a profit.”); see also *Converse v. Udall*, 399 F.2d 616, 621 (9th Cir. 1968) (referring to the same proposition).

110. See *Coleman*, 390 U.S. at 604 (explaining that building stone must meet the same standards as that for the discovery of other valuable minerals, and if it does not meet this standard, then it is not economically feasible to extract it).

111. See *Coleman*, 390 U.S. at 604 (applying the Marketability Test to high value deposits).

112. See *Converse*, 399 F.2d at 621 (“The marketability test also has the advantage of throwing light on a claimant's intention, a matter which is inextricably bound together with valuableness.”).

113. See *United States v. Garcia*, 161 Interior Dec. 235, 242 (IBLA 2004) (noting the Interior Board of Land Appeals' position that “[g]enerally, when a Government mineral examiner, who has had sufficient training and experience to qualify as an expert witness, testifies that he has physically examined a claim and found mineral values insufficient to indicate the discovery of a valuable mineral deposit, the United States has established a prima facie case that the claim is not supported by a discovery.”); see also *American Colloid Co.*, 162 Interior Dec. 158, 172 (IBLA 2004) (explaining that the government may not summarily reject a mineral patent application on the basis of the lack of discovery of a valuable mineral deposit without allowing a contest where there are disputed issues of material fact).

114. See *United States v. Martinek*, 166 Interior Dec. 347, 404 (IBLA 2005) (“Moreover, this Board has held that “[u]ncontradicted evidence of absence of production from a mining claim over a period of years is sufficient, without more, to establish a prima facie case of invalidity of the claim.”).

marketability.¹¹⁵ Aside from the application of the above tests, other problems may arise for claimholders who seek to maintain unpatented mining claims before discovery for value arises—known as “unperfected” mining claims. Some of these specific problems, as well as one helpful doctrine that may assist in their resolution, are discussed in the next section of this article.

B. Specific Problems in Maintaining Unpatented Mining Claims Prior to Discovery for Value

Specific problems may be encountered in maintaining unpatented mining claims prior to discovery for value. An “unperfected mining claim” is defined as an unpatented mining claim that has been located but not yet defined or assessed for value. An unperfected mining claim may have few property rights.¹¹⁶ For instance, land classifications and withdrawals, which prohibit the location of certain new mining claims, can prevent the holder of an unperfected mining claim from ever validating the claim.¹¹⁷ Furthermore, an unperfected mining claim may not even be entitled to due process by notice of invalidation since the claim does not gain the rights of a real property interest until an actual and valuable discovery is made.¹¹⁸

One beneficial doctrine that sometimes assists potential claimholders in their pursuit of unpatented mining claims is the *pedis possessio* (“foot possession”)¹¹⁹ doctrine. The *pedis possessio* doctrine allows a claimholder to explore an unpatented claim, regardless of mineralization or motive.¹²⁰ However, the *pedis possessio* doctrine is of limited benefit since the claimholder is required to continuously and

115. See, e.g., *Rodgers v. Watt*, 726 F.2d 1376, 1379 (9th Cir. 1984) (“This court has made clear that although lack of actual marketing of the mineral by the claimant may be relevant to the question of marketability, it is not conclusive proof of invalidity of the claim.”).

116. See PRUITT, *supra* note 3, at 9 (discussing how a right of claim to an unpatented discovery is attenuated, and how easily these rights of claim may be cut off).

117. See PRUITT, *supra* note 3, at 9 (“Land classifications and withdrawals which prohibit location of new mining claims can cut off rights of a claim owner to ‘perfect’ his existing claims which do not yet meet these stringent requirements.”).

118. See *High Country Citizens Alliance v. Clarke*, 454 F.3d 1177, 1192 (10th Cir. 2006) (ruling that the GML precludes judicial review of the issuance of a patent if the plaintiff is a person who lacks any property interest in the patented land).

119. See ROCKY MOUNTAIN MINERAL LAW FOUND., *supra* note 1, at 34-3 (“To protect a prospector’s occupancy prior to discovery and to carry out the intent of the Mining Law of 1872, courts adopted from the customs of miners the doctrine of *pedis possessio*. . . . *Pedis possessio* is Latin meaning ‘a foothold,’ . . .”).

120. See *Union Oil Co. v. Smith*, 249 U.S. 337, 349 (1919) (“Actual and continuous occupation of a valid mining location based upon discovery is not essential to the preservation of the possessory right. The right is lost only by abandonment, . . .”).

diligently¹²¹ occupy and explore many potential claims as part of the process—a burdensome task.¹²² Consequently, even taking account of the *pedis possessio* doctrine, legitimate prospectors often have very fragile pre-discovery protection.¹²³ Once established, an unpatented mining claim may also be lost to abandonment,¹²⁴ an issue that is the subject of the following section of this article.

C. Specific Problems in Avoiding Abandonment of Unpatented Mining Claims

An unpatented mining claimholder must also satisfy federal and state mining laws and regulations to prevent the claim from being deemed abandoned and, thus, subject to relocation by other claimholders.¹²⁵ State laws relating to unpatented mining claims vary, but generally discuss

121. See *Ranchers Exploration & Dev. Co. v. Anaconda*, 248 F. Supp. 708, 721 (D. Utah 1965) (“It is held that upon the public domain a miner may hold the place in which he may be working against all others having no better right, and while he remains in possession, diligently working towards discovery, is entitled—at least for a reasonable time—to be protected . . . intrusions upon his possession.”); *Adams v. Benedict*, 327 P.2d 308, 319 (N.M. 1958) (“He may hold it only for such time as he is diligently and persistently conducting his operations in good faith with the intent to make a discovery of mineral.”).

122. See *Ranchers Exploration & Dev. Co.*, 248 F. Supp. at 724 (“It may be recognized that modern conditions may make desirable, and governing legal principles may in proper cases be hospitable towards efforts on the part of prospectors to hold possession of substantial areas long enough to lay the foundations of, and to practically accomplish, their diligent exploration,”); see *Adams*, 327 P.2d at 319–21 (explaining that defendant failed to maintain continuous and diligent occupation and exploration and therefore other parties were permitted to take possession); Terry Noble Fiske, *Pedis Possessio: Modern Use of an Old Concept*, 15 ROCKY MOUNTAIN MINING LAW INST. 181, 209–10 (1969) [hereinafter *Modern Use*] (explaining *pedis possessio* is no longer appropriate or effective); James M. Finberg, Comment, *The General Mining Law and the Doctrine of Pedis Possessio: The Case for Congressional Action*, 49 U. CHI. L. REV. 1026, 1028 (1982) (“In recent years, mining industry representatives have argued that recognition of *pedis possessio* rights on a claim-by-claim basis no longer provides adequate protection for investment in mineral exploration.”); Terry Noble Fiske, *Pedis Possessio—New Dimensions or Back to Basics?*, 34 ROCKY MOUNTAIN MINING LAW INST. 8-1, 8-33 (1988) (“[A]rbitrary restriction of *pedis possessio* to parcels of any particular, prescribes size, and especially the uniform, national imposition of such a restriction may, in some circumstances, discourage exploration.”).

123. See *Modern Use*, *supra* note 122, at 208–14 (discussing the vulnerability of locators before discovery is made); see ROCKY MOUNTAIN MINERAL LAW FOUND., *supra* note 1, at 34–35 (discussing the weak rights afforded a prospector before discovery by the judicial doctrine of *pedis possessio*).

124. See *Union Oil Co.*, 249 U.S. at 349 (“The right is lost only by abandonment, as by nonperformance of the annual labor required by section 2324.”).

125. See *Red Top Mercury Mines, Inc. v. U.S.*, 887 F.2d 198, 206 (9th Cir. 1989) (affirming the decision of the lower court that six unpatented mining claims had been abandoned because of failure to file notice of intention to hold or notice of assessment work); PRUITT, *supra* note 3, at 9 (explaining that a failure to timely perform required work pursuant to state and federal laws will subject the claim to relocation by any other party).

recording processes, costs, and documentation requirements. The Federal Land Policy and Management Act of 1976 requires that an unpatented claimholder file either a Notice of Intention to Hold the mining claim or an affidavit of assessment work performed thereon, as the case may require.¹²⁶ The claimholder must initially file one of the two at the time of location, then must file annually in the office where the location notice is recorded.¹²⁷ The claimholder is only *required* to file a Notice of Intention to Hold with the BLM when a claim is first located between September 1 and December 31 and if the claimant plans to file a waiver (such as a small miner waiver) for the upcoming assessment year.¹²⁸

The Federal Land Policy and Management Act of 1976 also requires that the unpatented claimholder annually file, in the BLM office designated by the Secretary, a copy of the official record of the instrument filed or recorded, including a description of the location of the mining claim sufficient to locate the claimed lands on the ground.¹²⁹ Failure to comply with all of the filing requirements of the Federal Land Policy and Management Act of 1976 constitutes an abandonment of an unpatented mining claim.¹³⁰ Courts have found that claims were abandoned for failure

126. See 43 U.S.C.A. § 1744(a)(1) (2006) (“File for record in the office . . . either a notice of intention to hold the mining claim . . . an affidavit of assessment work performed thereon”).

127. See *id.* § 1744(a) (2006) (“The owner of an unpatented lode or placer mining claim located after October 21, 1976 shall, prior to December 31 of each year following the calendar year in which the said claim was located, file the instrument required by paragraphs (1) and (2) of this subsection.”); Mark Squillace, *The Enduring Vitality of the General Mining Law of 1872*, 18 ENVTL. L. REP. 10261, 10264 (1988) [hereinafter *Enduring Vitality*] (“FLPMA requires claimants to file evidence of their assessment work (or notice of their intentions to hold the claim) ‘prior to December 31 of each year following the calendar year in which the . . . claim was located.’”).

128. See Bureau of Land Mgmt., *BLM Colorado State Office: Mining Claim Packet*, DEP’T OF THE INTERIOR, (2013), available at <http://www.blm.gov/pgdata/etc/medialib/blm/co/programs/minerals.Par.22906.File.dat/2013%20mine%20packet.pdf> (stating that a required first year filing related to assessment is counterintuitive because assessment requirements are normally waived during the claim’s first year).

129. See Federal Land Policy and Management Act § 1744(a)(2) (1976) (“File in the office of the Bureau designated by the Secretary a copy of the official record of the instrument filed or recorded pursuant to paragraph (1) of this subsection, including a description of the location of the mining claim sufficient to locate the same lands on the ground.”).

130. See *id.* § 1744(c) (“The failure to file such instruments as required by subsections (a) and (b) of this section shall be deemed conclusively to constitute an abandonment of the mining claim”); *Red Top Mercury Mines, Inc.*, 887 F.2d at 206 (confirming that when the requirements of FLPMA have not been met, the conclusive presumption of abandonment becomes effective); see generally James K. Aronstein, *Simultaneous Amendment and Conditional Relocation: How to Cope with a Possibly Void or Invalid Claim*, 33 ROCKY MTN. MIN. L. INST. 10-1 (1988) (discussing the dilemma of whether to choose amendment or relocation).

to file required documents on time, even in cases where there is a showing of substantial compliance with the regulations.¹³¹ After a claim has been abandoned, the original claimholder, generally, may simply relocate the claim, unless the lands have been withdrawn from location or located by a competing claimholder in the interim.¹³²

As part of the process of preventing an abandonment of an unpatented claim, an annual assessment of fees or labor needs to be filed for each claim. A discussion of this process is outlined below.

1. Annual Assessment Fees or Labor

Federal law requires that a maintenance fee of \$140 per claim be paid to avoid the abandonment of a claim, unless the claimholder is considered to be a small mining operation, holding ten or fewer claims.¹³³ The small mining exception, however, requires that the miner perform \$100 worth of assessment work each year.¹³⁴ The assessment work must be done for each lode claim, but associated placer claims require only \$100 worth of work.¹³⁵ Assessment fee payments apply for the assessment year (September 1 to August 31), not necessarily the ensuing twelve months.¹³⁶

131. *Red Top Mercury Mines, Inc. v. United States*, 887 F.2d 198, 204 (9th Cir. 1989) (“In effect, a miner could do everything right but-due to misfiling, a filing lost in the mail, or various other problems-could be in violation of the filing requirement, and years later be told that his claim is deemed abandoned.”).

132. *See* George Cameron Coggins & Robert L. Glicksman, *Location-Federal Location Requirements-Federal Filing Under FLPMA*, 4 PUB. NAT. RESOURCES L. § 42:13 (2d ed. 2007) (“In the ordinary case, however, involving neither a land nor a mineral withdrawal, failure to file in a timely manner will mean only that the claim is subject to relocation by rivals until the original locator relocates and cures procedural deficiencies.”).

133. A maintenance fee of \$140 per claim is also due annually thereafter. *See* Dept. of the Interior & Related Agencies Appropriations Act, Pub. L. No. 102-381, 106 Stat. 1374, 1377 (1992) (granting authority for fees to be collected); *see* Bureau of Land Mgmt., *Maintaining a Mining Claim*, DEP’T OF THE INTERIOR, (Jul. 30, 2012), http://www.blm.gov/wy/st/en/programs/mineral_resources/Mining_Claims/maintain.html [hereinafter *Maintaining a Mining Claim*] (“An annual \$140 maintenance fee per claim is required”) (on file with the Washington and Lee Journal of Energy, Climate, and the Environment).

134. *See* George Cameron Coggins & Robert L. Glicksman, *Diligence-Assessment Work*, 4 PUB. NAT. RESOURCES L. § 42:21 (2d ed. 2007) (“The General Mining Law incorporated such local rules and also provided that ‘not less than \$100 worth of labor shall be performed or improvements be made during each year’ to hold an unpatented claim.”).

135. *See Enduring Vitality*, *supra* note 127, at 10265 n.54 (“A 160-acre association placer is *one* claim. Thus, only \$100 worth of work must be performed on the entire claim.”).

136. *See* Benjamin Haimen, 134 Interior Dec. 196, 196 (IBLA 1995) (discussing a provision which requires claimants to pay, on or before August 31, 1993, a \$100 fee per claim with the assessment year beginning on September 1). A mining claimant who records a claim in a succeeding year has the entirety of the 90-day recordation period within which to pay the fee for the succeeding assessment year or request a waiver by filing a waiver

Not all expenditures will qualify as “assessment labor,” which is needed to maintain a patented mining claim so as to avoid abandonment. The assessment work requirement assumes that a valid discovery has been made; as such, exploration work does not count toward the assessment work total.¹³⁷ Geological, geochemical, and geophysical work only qualifies for a limited period of time—a maximum of two consecutive years or five years in total for any mining claim.¹³⁸ Furthermore, some states require that special forms be recorded when such work is claimed as the qualifying assessment labor.¹³⁹ The safest way to ensure that the assessment labor requirement is met is to conduct actual mining activities.¹⁴⁰ The next safest qualifying activity is physical work leading toward development of a mine.¹⁴¹ Any other type of work should be carefully analyzed to determine whether the expenditure qualifies as “assessment labor” sufficient to maintain and avoid abandonment of an unpatented mining claim.¹⁴²

Furthermore, a claimholder performing assessment work in lieu of paying maintenance fees must record evidence of such assessment labor expenditures with the BLM by December 30 of the calendar year in which the expenditures were made.¹⁴³ State mining laws may further require that affidavits be recorded within a specified time after the annual deadline for completing the assessment labor requirements.¹⁴⁴ There is a \$10 per claim charge for recording an affidavit of annual assessment with the BLM.¹⁴⁵ A

certification. *See* Lisa Tucker, 167 Interior Dec. 82, 86 (IBLA 2005) (explaining that assessment fee payments are dues on or before September 1st of each year).

137. *See, e.g.,* Union Oil Co. v. Smith, 249 U.S. 337, 350 (1919) (“And it is not to be doubted that the terms ‘assessments’ and ‘annual assessment labor’ refer to the annual labor required by section 2324”).

138. *See* PRUITT, *supra* note 3, at 10 (“Prior to 1958, geological, geochemical and geophysical work did *not* qualify. Even today, such work can be applied only for two consecutive years, or for a total of five years as to any mining claim.”).

139. *See* PRUITT, *supra* note 3, at 10 n.3 (“In the case of such work a specified form of ‘report’ must be recorded.”).

140. *See* PRUITT, *supra* note 3, at 10 (“The best qualified assessment work is actual mining . . .”).

141. *See* PRUITT, *supra* note 3, at 10 (“[T]he next best is physical work leading towards development of a mine.”).

142. *See* PRUITT, *supra* note 3, at 10 (“Any other type of work or expenditure, such as surveys, sampling or even construction of improvements, should be checked carefully to confirm that it qualifies under applicable court decisions.”).

143. *See Maintaining a Mining Claim, supra* note 133 (“The annual assessment document must be filed or postmarked by December 30th.”).

144. *See* PRUITT, *supra* note 3, at 9 (“State mining laws require that an affidavit be recorded within a specified period after the deadline for completing such assessment work.”).

145. *See Maintaining a Mining Claim, supra* note 133 (“The charge for recording an affidavit of annual assessment with BLM is \$10 per claim.”).

claim may be voided and relocated due to a failure to timely meet assessment and affidavit filing requirements.¹⁴⁶

Aside from all the procedural issues discussed above, the BLM has several other administrative methods for challenging unpatented mining claims. The next section of this article outlines a few of these methods.

D. Bureau of Land Management Contests in General

Mining on federal lands is also subject to heightened standards and enforcement by the BLM (and by the Forest Service, although the Forest Service standards and enforcement tools are not specifically discussed in this Article). The BLM enforces environmental operations and occupancy standards, such as the General Mining Act's use limitations (discussed in greater detail in Section V below), the Federal Land Policy and Management Act ("FLPMA"),¹⁴⁷ and the Surface Resources Act.¹⁴⁸ Patented mining claim lands are no longer federally owned, so the heightened standards and enforcement by the BLM pertaining to mining activities on federal lands really only affects unpatented mining claimholders. In *Cameron v. United States*, the U.S. Supreme Court held that, so long as the legal title remains with the government (i.e. an

146. See PRUITT, *supra* note 3, at 9 ("Failure to timely perform the required work will subject the claim to a relocation by any other party who locates his adverse claim after the period for doing assessment work has expired."); see also *Cliffs Synfuel Corp. v. Babbitt*, 147 F. Supp. 2d 1118, 1123–24 (D. Utah 2001) (holding that failure of owner to comply with assessment work requirement did not preclude owner from resuming work on claims, absent subsequent relocation of claim by third person or affirmative action by United States towards invalidating claim before assessment work had resumed); *Exxon Mobil Corp. v. Norton*, 346 F.3d 1244, 1248–52 (10th Cir. 2003) (holding that a claim may be voided and relocated due to a failure to timely meet assessment and affidavit filing requirement as long as the decision was supported by substantial evidence and was not arbitrary or capricious); *but see Marathon Oil Co. v. Lujan*, 751 F. Supp. 1454, 1459 (D. Colo. 1990) (holding that the completion of assessment work totaling \$500 or more, regardless of lapses in assessment years, constituted substantial compliance with the statutory requirements, entitling the claimholder to a patent). However, the holding in *Marathon Oil Co.* is an outlier and would completely nullify the assessment work requirement if the holding were broadly construed.

147. The Federal Land Policy and Management Act § 1732(b) amended the General Mining Act by requiring the Secretary of the Interior to "prevent unnecessary or undue degradation of the lands, . . . by regulation or otherwise." See 43 U.S.C. § 1732(b) (2006) ("In managing the public lands the Secretary shall, by regulation or otherwise, take any action necessary to prevent unnecessary or undue degradation of lands). The BLM issued environmental regulations in 1980, amendments in 2000, and final amendments in 2001.

148. The Surface Resources Act makes post-1955 locations expressly subject to federal surface management, such as the prohibition on non-mining uses prior to patenting. See 30 U.S.C. § 612(a) (2006) ("Any mining claim hereafter located under the mining laws of the United States shall not be used, prior to issuance of patent therefor, for any purposes other than prospecting, mining or processing operations and uses reasonably incident thereto.").

unpatented claim),¹⁴⁹ the government has the power, after proper notice and upon adequate hearing, to initiate contests to determine whether the claim is valid¹⁵⁰ and how the unpatented claimholder may use and occupy such land.¹⁵¹

1. Bureau of Land Management Environmental Regulation Contests

The BLM environmental regulations¹⁵² divide mining operations

149. See *Cameron v. United States*, 252 U.S. 450, 460 (1920) (explaining that an unpatented mining claim may confer equitable title, but only the patenting of a mining claim confers legal title to the prospector-claimholder).

150. See generally *id.* at 460 (explaining that the BLM has unconstrained discretion to initiate an examination of the validity of a mining claim at any time before a patent is issued. If the claim is found to be invalid, the government has the power to declare the claim abandoned).

151. See 43 C.F.R. § 3809.601(b)(1)(i) (2006) (declaring that the BLM may suspend part or all of an operation for a significant violation under paragraph (a)); *Id.* § 3809.602(a) (2006) (declaring that BLM may revoke a plan of operations or nullify a notice upon certain factual findings); *Cameron*, 252 U.S. at 460 (“If valid, [an unpatented mining claim] gives to the claimant certain exclusive possessory rights . . .”).

152. Underlying the final amendments to regulations in 2001 was the notion that impacts necessary to mining should not simply be presumptively allowed to occur. See 65 Fed. Reg. 69998, 70001 (2000) (“[T]he definition . . . will more completely and faithfully implement the statutory standard, by protecting significant resource values of the public lands without resuming the impacts necessary to mining must be allowed to occur.”). The 2001 regulations defined “unnecessary and undue degradation” to mean conditions, activities, or practices that: (1) fail to comply with performance standards set forth in the regulations, the terms and conditions of an approved plan of operations, operations described in a complete notice, and “other Federal and State laws related to environmental protection and protection of cultural resources;” (2) are not “reasonably incident” to prospecting, mining, or processing operations; or (3) fail to attain a stated level of protection or reclamation required by specific laws governing areas such as wild and scenic rivers, BLM-administered portions of the national wilderness system, or BLM-administered national monuments. See 43 C.F.R. § 3809.5 (2001) (defining “unnecessary and undue degradation”). The 2001 regulations provide that operators must comply with applicable federal and state laws such as the Clean Air Act, the Clean Water Act, and the Resource Conservation and Recovery Act. See *Clean Air Act*, U.S. ENVTL. PROTECTION AGENCY, <http://www.epa.gov/air/caa/> (last visited Feb. 17, 2012) (on file with the Washington and Lee Journal of Energy, Climate, and the Environment); *Summary of the Clean Water Act*, U.S. ENVTL. PROTECTION AGENCY (Aug. 23, 2012), <http://www.epa.gov/lawsregs/laws/cwa.html> (on file with the Washington and Lee Journal of Energy, Climate, and the Environment). See 43 C.F.R. § 3809.420(b) (2001). The 2001 regulations also provide performance standards addressing acid-forming, toxic, and deleterious materials and the standards governing leaching operations and impoundments. See *id.* §§ 3809.420(c)(3),(4) (2001) (discussing the regulation of acid-forming, toxic, or other deleterious materials and leaching operations and impoundments). The 2001 regulations do require that operators reclaim disturbed areas at the earliest feasible time by taking “reasonable measures” to prevent on and off-site damage to federal lands. See *id.* § 3809.420(a)(5) (2001) (“You must initiate and complete reclamation at the earliest

into three categories: (1) casual use mines;¹⁵³ (2) notice mines;¹⁵⁴ and (3) plan of operations mines.¹⁵⁵ All three categories must be reclaimed,¹⁵⁶ but

economically and technically feasible time on those portions of the disturbed area that you will not disturb further.”).

153. Claimholders merely involved in casual use operations need not notify the BLM or seek the agency’s approval before commencing such operations. *See* 65 Fed. Reg. 69998, 70004 (2000) (explaining that a person would not have to notify BLM or seek approval for “casual use”); 43 C.F.R. § 3809.10(a) (2001) (“Causal use, for which an operator need not notify BLM.”). Casual use operations are “activities ordinarily resulting in no or negligible disturbance of the public lands or resources.” *See* 65 Fed. Reg. 69998, 70004 (2000). The cumulative effect of activities must be taken into account in determining whether the use is casual. *See* *Bales v. Ruch*, 522 F. Supp. 150, 156 (E.D. Cal. 1981) (“[P]laintiffs’ use of the land under claim is clearly not a ‘casual use’ inasmuch as plaintiffs are substantially littering the land, discharging waste thereon, fencing off the road leading into the claim and posting ‘no trespassing’ signs”); 43 C.F.R. § 3809.31(a) (2001) (“Where the cumulative effects of casual use by individuals or groups have resulted in, or are reasonably expected to result in, more than negligible disturbance, the State director may establish specific areas as he/she deems necessary where any individual or group intending to conduct activities under the mining laws must contact BLM 15 calendar days before beginning activities to determine whether the individual or group must submit a notice or plan of operation.”).

154. Claimholders engaged in notice-level operations must notify the BLM of the operations fifteen calendar days before commencing such operations. These operations include those causing surface disturbance of five acres or less of public lands on which reclamation has not been completed. *See* 43 C.F.R. § 3809.21(a) (2013). Mining operators may not segment a project area by filing a series of notices (each of which covers an area of five or fewer acres) to avoid having to file a plan of operations. *See id.* § 3809.21(b) (2013). The regulations specify the required contents of a notice, including: (1) a description of the proposed activity; (2) the measures to be taken to prevent unnecessary and undue degradation; (3) a map showing the location of the project; (4) a description of the type of equipment to be used; (5) a schedule of activities, including the dates the operator expects to begin operations and complete reclamation; (6) a reclamation plan; and (7) a reclamation cost estimate. *See id.* § 3809.301(b) (2013). The entity filing the notice may begin operations fifteen days after the appropriate BLM office receives a complete notice, provided it supplies the BLM with necessary financial guarantees, unless within that time the BLM notifies the entity that: (1) it needs additional time to review the notice; (2) the notice must be modified to prevent unnecessary or undue degradation; (3) consultation with the BLM is necessary about the location of access routes; (4) an on-site visit is necessary; or (5) the operations do not qualify as a notice-level operation. *See id.* §§ 3809.312–3809.313 (2013). However, the BLM may not disqualify an operation from proceeding as a notice-level operation and force the operation to proceed as a plan-level operation based on concerns about unnecessary or undue degradation. *See* *LKA Int’l Inc.*, 175 Interior Dec. 225, 235–36 (IBLA 2008). A notice remains in effect for two years, although two-year extensions may be available. *See* 43 C.F.R. §§ 3809.332–3809.333 (2013). Upon expiration of a notice, the operator must cease operations and complete reclamation promptly. *See id.* § 3809.335(a) (2013).

155. Claimholders intending to engage in mining operations on federal public domain lands, even if the disturbed area is less than five acres, must submit a plan of operations to the BLM and obtain the BLM’s approval before beginning operations greater than casual use but that are not within the constraints of a notice-level operation. *See* 43 C.F.R. § 3809.11(a) (2013); *George Stroup*, 164 Interior Dec. 74 (IBLA 2004); *Mining Claims Under the General Mining Laws; Surface Management*, 65 Fed. Reg. 69998, 70004 (2000) (providing that exploration operations require submission of a plan only if they will disturb more than

different procedures and substantive requirements apply to each category, particularly as to how and when mining operations may begin.¹⁵⁷ The BLM policy behind the separate categories is that “[a]s mining operations increase in size and complexity, the BLM’s up-front involvement should also increase.”¹⁵⁸

The BLM reserves the right to inspect mining operations located on public lands and may conduct such inspections up to four times each year if acid leakage is possible.¹⁵⁹ The BLM may issue a noncompliance order if an operation fails to conform to a notice provision, a plan of operations, or a provision of the regulations.¹⁶⁰ The BLM may suspend all or part of a mining operation if the operator fails to comply in a timely manner with a noncompliance order for a significant violation, which the regulations

five acres). A plan of operations is more detailed than a notice, and the BLM regulations amended in 2000 provide a more comprehensive list of plan requirements than the pre-existing regulations. Each plan of operations should include: (1) a description of the operations, including a map of the project area; (2) designs and operation plans for mining areas, processing facilities, and waste rock and tailing disposal facilities; (3) water management, rock handling, quality assurance, and contingent plans; (4) a schedule of operations from start through closure; (5) a reclamation plan; (6) a proposed plan for monitoring the effect of operations; and (7) an interim management plan to manage the project areas during periods of temporary closure to prevent unnecessary or undue degradation. *See* 43 C.F.R. § 3809.401(b) (2013). The BLM may require the operator to supply baseline environmental information to assist the agency in analyzing potential environmental impacts under NEPA and to determine whether the plan of operations will prevent unnecessary or undue degradation. *See id.* § 3809.401(c) (2013). The BLM will review a plan of operations within thirty days and notify the operator whether it is complete or whether approval must be delayed pending collection of additional information, an on-site visit, agency review of public comments, or consultation with the surface management agency. *See id.* § 3809.411(a) (2013). After completing its review, the BLM will: (1) approve the plan as submitted; (2) approve the plan subject to changes or conditions necessary to meet applicable performance standards and to prevent unnecessary or undue degradation; or (3) disapprove the plan. Disapproval may be based on a variety of grounds, including failure to supply necessary information, location of proposed operations in an area segregated or withdrawn from operation of the mining laws, or inconsistency with the unnecessary or undue degradation standard. *See id.* §§ 3809.100, 3809.411(d) (2013). The BLM is required to disapprove of the plan if unnecessary or undue degradation cannot be prevented by mitigating measures. *See* *Nez Perce Tribal Exec. Comm.*, 120 Interior Dec. 34, 36 (IBLA 1991), *citing* 43 C.F.R. § 3809.2-1(b) (2013). Operations may not begin until the BLM approves a plan of operations and the operator supplies the financial guarantees required by the regulations. *See* 43 C.F.R. § 3809.412 (2013). An approved plan of operations remains in effect as long as operations continue, unless the BLM suspends or revokes the plan for noncompliance with the regulations. *See id.* § 3809.423 (2013).

156. *See* 43 C.F.R. § 3809.10 (2013); *Northwest Mining Association v. Babbitt*, 5 F. Supp. 2d 9, 11 (D.D.C. 1998) (discussing the reclamation of mining lands).

157. 43 C.F.R. § 3809.5 (2013).

158. 65 Fed. Reg. 69998, 69999 (2000) (amending regulations involving the mining of metallic and other minerals on public lands).

159. 43 C.F.R. § 3809.600(b) (2013).

160. *Id.* § 3809.601(a).

define as “one that causes or may result in environmental or other harm or damage or that substantially deviates from the complete notice or approved plan of operations.”¹⁶¹ The BLM may revoke a plan of operations or nullify a notice if it finds that an operator has failed to correct a violation within the time specified in a noncompliance or suspension order or if a pattern of violations exists at a particular operation.¹⁶² If an operator fails to comply with a noncompliance, suspension, or revocation order, the BLM may request that the Department of Justice initiate a civil enforcement action.¹⁶³ Operators engaged in knowing and willful violations may be subject to criminal penalties.¹⁶⁴ Furthermore, the BLM may use financial guarantees as an important compliance tool where such guarantees are relevant.¹⁶⁵ Lastly, it should be noted that where a prospector-claimholder’s mining plan has been suspended, revoked, or denied for environmental concerns, the regulatory cost of compliance could conceivably be so great that it causes the claim to no longer be considered a presently valuable discovery. Under such a scenario, the BLM’s environmental contest could conceivably render the claim, in itself, wholly invalid and abandoned.

2. Bureau of Land Management Occupancy Regulation Contests

The BLM issued regulations in 1996 to restrict the unlawful use and occupancy of unpatented mining claims for non-mining purposes.¹⁶⁶ Although the BLM had long been aware of certain such abuses of the mining laws, the 1996 occupancy regulations were largely sparked by a 1990 General

161. *Id.* § 3809.601(b)(1)(i).

162. *Id.* § 3809.602(a).

163. *Id.* §§ 3809.604(a), 700.

164. *Id.* § 3809.700. The 2000 regulations authorized the BLM to assess civil penalties of up to \$5000 for each violation of a BLM noncompliance order. *See* 65 Fed. Reg. 69998, 70016, 70130 (2000). However, in 2001, the BLM removed these provisions because it concluded that FLPMA does not expressly authorize the BLM to assess administrative civil penalties. “[T]his is an unsettled area for which it is prudent to await clear guidance from Congress before promulgating rules.” *See* 66 Fed. Reg. 54834 (2001).

165. Casual use operators need not provide the BLM with any financial guarantees; however, operators engaged in notice or plan-level operations generally must do so. *See* 43 C.F.R. § 3809.500. The regulations specify both the timing and content of those guarantees. *See* 43 C.F.R. §§ 3809.503, 3809.505, 3809.551 (2013). The regulations describe three different forms of guarantees—individual guarantees, blanket guarantees, and state-approved guarantees. *See id.* §§ 3809.552–3809.574 (2013); *Great Basin Mine Watch v. Hankins*, 456 F.3d 955, 974–75 (9th Cir. 2006). Upon completion of reclamation, the BLM may approve a reduction in or release of the guarantee. *See* 43 C.F.R. §§ 3809.590–3809.594 (2013). The BLM may initiate forfeiture of all or part of a financial guarantee if the mining operator fails to conduct appropriate reclamation, fails to meet the terms of a notice or approved plan of operations, or defaults on conditions under which it obtained the guarantee. *See id.* § 3809.595.

166. 43 C.F.R. § 3715 (2013).

Accounting Office report¹⁶⁷ confirming that certain holders of unpatented claims were using such unpatented claim lands for unauthorized residences, non-mining commercial operations, illegal activities, and/or speculative activities not related to legitimate mining.¹⁶⁸ The invalid uses contributed to a series of problems, including blocked access to BLM lands, environmental contamination, investment scams, and increased land reclamation costs.¹⁶⁹ Pursuant to its authority under Section 4 of the Surface Resources Act of 1955,¹⁷⁰ the BLM sought to address these problems by issuing regulations that serve to eliminate such invalid uses.¹⁷¹

Prospector-claimholders must consult with the BLM before their occupancy begins.¹⁷² A prospector-claimholder's occupancy may not begin until: (1) the prospector-claimholder complies with the mining operation regulations described above;¹⁷³ (2) the BLM completes its review and makes all required determinations; and (3) the prospector-claimholder procures all applicable federal, state, and local permits.¹⁷⁴ Furthermore, under the 1996 occupancy regulations, a person occupying the public lands¹⁷⁵ under the mining laws¹⁷⁶ for more than fourteen calendar days in any ninety-day period within a twenty-five mile radius of the initially occupied site must be engaged in activities that: (1) are reasonably incident to prospecting, mining, or processing operations;¹⁷⁷ (2) constitute substantially regular work;¹⁷⁸ (3) are

167. U.S. GOV'T ACCOUNTABILITY OFFICE, GAO/RCED 90-11, UNAUTHORIZED ACTIVITIES ON HARDROCK CLAIMS (1990).

168. See 61 Fed. Reg. 37116, 37117 (1996).

169. See *id.* (describing the development of the proposed legislation and the reasons behind it).

170. See 30 U.S.C.A. § 612 (West 2012) (wording of the proposed legislation regarding unpatented mining claims).

171. See 43 C.F.R. § 3715.0-1(a) (2013) (discussing that the BLM will prevent abuse to public lands that could be potential mining targets).

172. 43 C.F.R. § 3715.2-3 (2013).

173. *Id.* §§ 3800, 3802, 3809.

174. See 43 C.F.R. § 3715.3-1 (2013) (stating the ability of BLM to remove improper uses of mining land). See Gerald A. Henderson, 156 Interior Dec. 84 (IBLA 2001) (ordering an immediate suspension of use or occupancy of land that was devoted to residential purposes on mining land). See ALANCO Env'tl. Res. Corp., 145 Interior Dec. 289 (IBLA 1998) (describing that a company occupying a mill site for mining purposes without an approved plan of operations, but otherwise doing so lawfully, cannot be assessed trespass damages).

175. See 43 C.F.R. § 3715.0-5 (2013).

176. See *id.* (discussing that the mining laws apply to hardrock mining on public lands and make public lands available for hardrock mineral development and case law interpreting those laws).

177. See *id.* (describing that the regulatory definition of "reasonably incident" is meant to track Section 4 of the Surface Resources Act of 1955). See Austin Shepherd, 178 Interior Dec. 224, 235 (IBLA 2009) (stating that the possessory interest afforded to mining claimants under the 1872 Mining Law does not take the form of an unfettered right to reside on and occupy the public lands, and that the right to exclusive possession lasts only as long as it is

reasonably calculated to lead to the extraction and beneficiation of minerals; (4) involve observable on-the-ground activity that the BLM may verify; and (5) use appropriate and presently operable equipment.¹⁷⁹ In addition, the occupancy¹⁸⁰ must involve protection of accessible valuable minerals or operable equipment from theft or loss, protection of the public from hazardous equipment or surface uses,¹⁸¹ or location in an isolated area necessitating workers to remain onsite.¹⁸² However, the 1996 occupancy regulations do not apply to persons engaged in recreational activities on the public lands.¹⁸³

The regulations specify what information must be provided to the BLM concerning proposed occupancy¹⁸⁴ as well as the consequences of failing to notify, which may include criminal penalties in certain egregious cases.¹⁸⁵ Upon a determination that a regulatory violation is occurring, the BLM may: (1) issue immediate suspensions, cessation orders,¹⁸⁶ or notices of noncompliance;¹⁸⁷ (2) require corrective action;¹⁸⁸ or (3) request that the

incident to prospecting and mining).

178. See 43 C.F.R. § 3715.0-5 (2013) (stating that the requirements of occupiers on mining land must be related to actual mineral mining); see Joe Gutierrez, 174 Interior Dec. 207, 219 (IBLA 2008) (finding no physical evidence to support claim of substantially regular work); see Leadville Corp., 166 Interior Dec. 249 (IBLA 2005) (stating that a long period of inactivity justified the BLM's conclusion that requirements had not been met); See Donna Friedman, 165 Interior Dec. 313 (IBLA 2005) (describing that bi-weekly visits, during which the claimants excavated and mined only a few cubic feet of placer material, did not amount to regular work). *But see* Thomas E. Swenson, 156 Interior Dec. 299 (IBLA 2002) (concluding that work on nearby property can hold an occupancy) and Cynthia Balsler, 170 Interior Dec. 269 (IBLA 2006); Dan Solecki, 162 Interior Dec. 178 (IBLA 2004) (describing that mining activities are not precluded from being "substantial and regular" based on their seasonal nature alone).

179. See 43 C.F.R. § 3715.2 (2013). Temporary extensions may be available from the BLM. *See id.* § 3715.2-3.

180. See *id.* § 3715.0-5 (discussing that "occupancy" includes full or part-time residence, as well as the construction, presence, or maintenance of temporary or permanent structures).

181. *Id.* § 3715.2-1(b).

182. *Id.* § 3715.2-1.

183. *Id.* § 3715.0-1(c).

184. *Id.* § 3715.3-2 (stating the specific information BLM requires about the proposed occupancy); see *id.* § 3715.4(b) (stating that the regulations provide for a one-year grandfather period for existing occupants).

185. *Id.* § 3715.4-2 (describing the possible consequences of failing to notify the BLM of occupancy).

186. See Trueman Hulegaard, 173 Interior Dec. 213 (IBLA 2007) (holding that the BLM properly issued a cessation order to cease use and occupancy of mining claim upon failure to comply with Notice of Noncompliance, but that the BLM lacked the authority to cease all mining-related activity).

187. See 43 C.F.R. § 3715.7-1 (2013) (describing the possible actions that BLM can take in response to impermissible uses or occupancy); see Joe Gutierrez, 174 Interior Dec. 207 (IBLA 2008), Karen v. Clausen, 161 Interior Dec. 168 (IBLA 2004) (upholding BLM order to cease occupancy and reclaim the land).

188. See Las Vegas Mining Facility, Inc., 166 Interior Dec. 306 (IBLA 2005)

Department of Justice file a civil action for injunctive relief in federal district court.¹⁸⁹ The BLM may not permanently bar entry to conduct mining operations after determining that the current occupancy is not reasonably incident to prospecting, mining, or processing operations.¹⁹⁰ This is because, according to the Interior Board of Land Appeals, the validity of a mining claim and permissibility of occupancy of the claim are separate questions.¹⁹¹ Therefore, a claimant whose occupancy has been found not to be reasonably incident may retain the right to reenter the claim for mining and milling operations.¹⁹² However, a valid cessation order (based on violation of the “reasonably incident” requirement) bars occupancy until the BLM approves a new occupancy.¹⁹³ The increased regulatory cost of compliance with the BLM could conceivably make the claim no longer presently valuable.¹⁹⁴ Therefore, it is conceivable that enforcement of BLM occupancy regulations could render the claim abandoned and subsequently un-locatable.¹⁹⁵

Next, this article will focus on the process of patenting a mining claim and the relative rights and advantages enjoyed by patented claimholders. The following section on patented mining claims will also provide the reader with the necessary background to understand the relative benefits enjoyed by patented claimholders in a Fifth Amendment Takings analysis (particularly in the context of federal land withdrawal) since patented land is no longer federal public domain land.¹⁹⁶

IV. Patented Mining Claims

A. In General

As previously stated, an unpatented mining claim merely gives the claimholder the limited right to mine federal lands for specific mineral

(affirming a BLM notice of noncompliance after finding that it did not include an improperly vague description of ways to correct the noncompliant occupancy).

189. 43 C.F.R. § 3715.7-2 (2013).

190. See *Cottonwood Gold Co.*, 178 Interior Dec. 386, 389 (IBLA 2010) (allowing a company to reenter the property for mining purposes because the validity of a mining claim and permissibility of occupation are separate claims).

191. *Id.* (stating that the questions of mining and occupancy are not mutually exclusive).

192. *Id.* (finding that *Cottonwood* could retain the land for mining purposes).

193. See *Combined Metals Reduction Co.*, 170 Interior Dec. 56, 76 (IBLA 2006) (raising the question of how long a company may leave an unpatented mining claim vacant without running afoul of the BLM occupancy regulations).

194. See *id.* at 76 (noting that compliance with occupancy regulations can be costly during economic downturns).

195. See *id.* at 77 (identifying the reality that many companies may simply abandon their unpatented mining claims were they required to fully comply with BLM regulations).

196. See Federal Land Policy and Management Act of 1976, 43 U.S.C. § 35 (2006) (empowering the BLM to locate abandoned, unpatented mining claims and remove any cloud of existing title by their former occupants).

deposits (although potentially to exhaustion), but a patented mining claim actually passes title from the federal government to the claimholder.¹⁹⁷ The passing of title gives the claimholder the exclusive title to all locatable minerals¹⁹⁸ and title to the surface lands.¹⁹⁹ Once the federal government issues a patent, the occupancy and claim maintenance (assessment) requirements of unpatented mining claims are no longer necessary.²⁰⁰ Furthermore, six years after the patent is issued, the issue of title over the claim becomes incontestable.²⁰¹ Now that the relative rights and advantages of patented claimholders have been addressed, the following subsection will discuss the federal claim patenting process and requirements.

B. The Traditional Process and Requirements of Obtaining a Patented Mining Claim

1. Process

Patenting is a two-step process.²⁰² After the claimant files a patent application with the Department of Interior (“DOI”) and pays the requisite fees, the DOI issues a “first half final certificate” if the application is facially regular.²⁰³ Thereafter, the DOI conducts an actual mineral examination to determine whether the discovery has the requisite value and the Secretary then decides patent issuance.²⁰⁴

197. See 30 U.S.C. §§ 22-24, 26-28, 29, 30, 33-35, 37, 39-42, 47 (2006) (containing no time limit as to unpatented claims); see also *Mining Claim*, *supra* note 7 (describing the shift in title that occurs during the patenting process).

198. See *Mining Claim*, *supra* note 7 (allowing for the mining company to take advantage of all different minerals located within the claim, whereas unpatented claims may only extract predetermined mineral deposits).

199. See *Mining Claim*, *supra* note 7 (allowing for the surface rights denied to unpatented claims). However, some patents in wilderness and other especially withdrawn areas may not be in fee simple since the patents would not include the surface estate. In the California Desert Conservation Area, for example, patented lands remain subject to regulation. See 16 U.S.C.A. § 1133(d)(3) (1992); 43 C.F.R. §§ 3809.2, 3809.420 (2013).

200. See PRUITT, *supra* note 3, at 168 (outlining the owner of an unpatented mining claim’s annual filing requirement that includes evidence of work performed).

201. See PRUITT, *supra* note 3, at 10 (perfecting the claim against other potential rivals).

202. See *Independence Mining Co. v. Babbit*, 885 F. Supp. 1356, 1358 (D. Nev. 1995) (stating that the process includes a mineral examination and report followed by a “secretarial review”).

203. See *id.* at 1357 (“Issuance of the FHFC ‘confirms [that] equitable title is vested in the applicant, subject to the confirmation of a discovery of a valuable mineral deposit by a mineral examiner,’ and ‘certifies that the applicant has satisfactorily complied with all of the ‘paperwork’ requirements of the Mining Law.’”).

204. See *id.* at 1358 (creating an examiners’ report that documents the field examination’s findings and includes the examiner’s conclusions).

2. Requirements

A mining claim must meet certain requirements to qualify as patentable. Similar to the requirement for obtaining an unpatented mining claim, a prospector-claimholder seeking a patent must make a discovery of “valuable” mineral as determined by applicable tests.²⁰⁵ The claimant must also comply with specific surveying, filing, inspection, and purchase price requirements, as well as the Multiple Use Act.²⁰⁶ In order to be patented, a claimholder must: (1) physically discover a valuable, locatable mineral deposit on open, un-appropriated federal land; (2) expend at least \$500 worth of labor or “patent improvements” on the claim; (3) comply with other federal and state regulations and procedures relating to unpatented mining claims; and (4) pay a nominal per-acre fee.²⁰⁷ Each of the four requirements is discussed separately below.

a. Discovery of Valuable, Locatable Minerals

As discussed in Section III above, an actual physical discovery may occur either where the claimholder actually exposes minerals with a value in excess of extraction costs or, possibly in limited circumstances, where a credible geologist determines that the mineral value of the subsurface mineral composition would exceed the costs of extraction.²⁰⁸ If a claim is actually located and discovered (either through unearthing or valid geological inference), the next question becomes whether such claim has been and is presently valuable. 30 U.S.C. § 29 requires the existence of a “valuable deposit” for a claim to be patentable.²⁰⁹ As discussed above, the term “valuable deposit” has been interpreted to require satisfaction of two distinct tests—the Prudent Man Test and the Marketability Test.²¹⁰ To be

205. See *id.* (qualifying the application for a “first half of mineral entry final certificate” or “FHFC”).

206. See *Mining Claim*, *supra* note 7 (outlining the process by which mining claims may be patented when a moratorium is not in existence).

207. See 30 U.S.C. § 29 (2006); 43 C.F.R. § 3860 (2013) (outlining the process for creation of patents through a statutory procurement procedure); see also *Patenting*, *supra* note 6 (describing the process by which claimants may purchase a lode claim at five dollars per acre).

208. See generally *Barton v. Morton*, 498 F.2d 288, 290 (9th Cir. 1974) (describing the “prudent man test” as determined by expert testimony concerning the possibility of value beyond extraction costs); see also *Wilderness Soc’y v. Dombeck*, 168 F.3d 367, 376 (9th Cir. 1999) (contrasting pre-withdrawal and post-withdrawal data when determining the marketability of a claim).

209. See 30 U.S.C. § 29 (2006); 43 C.F.R. § 3860 (2013) (creating certain criteria for the patenting of claims).

210. See cases cited *supra* notes 100–15 (describing the two most important tests concerning the valuation of a potentially patentable claim).

patentable, a mining claim must be of such a character that “a person of ordinary prudence would be justified in the further expenditure of his labor and means, with a reasonable prospect of success, in developing a profitable mine.”²¹¹ To be patentable, a mining claim must also be shown to be economically valuable, with the value of the deposit exceeding the costs of extraction, marketing, and regulatory compliance. Low-grade or low-demand minerals, whose raw material values are exceeded by the costs of extraction and transportation, are hardly economically valuable.²¹²

b. Mineral Survey

To be patented, a lode claim must be officially surveyed in accordance with federal and state government regulations.²¹³ The survey application requires a fee of \$750 on the first claim and \$300 for each additional claim.²¹⁴ Where a survey is required, an approved survey plat must be posted on the claim, alongside the universally required Notice of Intent to patent.²¹⁵

c. Application and Publication

Before a mining claim can be patented, a written application, containing statements and affidavits that clearly evidence title and citizenship, must be filed with the Bureau of Land Management State Office.²¹⁶ The service fee for filing an application is \$250 for the first claim and \$50 for each additional claim.²¹⁷ A notice of the patent application must be posted conspicuously on the claim and published in a local newspaper for 60 days.²¹⁸

211. See *Barton v. Morton*, 498 F.2d 288, 289 (9th Cir. 1974) (describing the need for actual marketability as a protection against purely speculative patenting).

212. See *Coleman v. United States*, 363 F.2d 190, 199 (9th Cir. 1966) (describing the administrative requirements for discovery of “valuable minerals” as well as those of “widespread occurrence”).

213. See *PRUITT*, *supra* note 3, at 13 (describing how a “placer” mining claim located precisely in accordance with surveyed legal subdivisions, does not require a mineral survey prior to patenting); see also 43 C.F.R. § 3860 (2013); *Mining Claim*, *supra* note 7 (reciting the steps necessary to patent a claim).

214. See *Mining Claim*, *supra* note 7 (defining the governments valuation for initial and subsequent patent purchases).

215. See *Mining Claim*, *supra* note 7 (providing notice to other potential claimants).

216. See *Mining Claim*, *supra* note 7 (requiring sworn statements and proof of citizenship for compliance with the BLM’s procedures).

217. See *Mining Claim*, *supra* note 7 (creating a slightly discounted rate for mining claims in comparison with lode claims).

218. See *PRUITT*, *supra* note 3, at 18; *Mining Claim*, *supra* note 7 (documenting the notice requirement).

d. Field Inspection

Before a mining claim can be patented, a field inspection conducted by a government expert must confirm the existence of the required discovery of: (1) a locatable, valuable mineral deposit; (2) the \$500 in “patent improvements;” and (3) general compliance with all other requirements.²¹⁹

e. Compliance with the Multiple Use Act

The Multiple Use Act governs claims located after 1955.²²⁰ The Multiple Use Act requires that a claim not be used for any purpose other than prospecting, mining, or processing operations and uses “reasonably incident thereto” before issuance of a patent.²²¹ If unpatented claim land ever fostered an invalid use prior to patenting, the BLM is within its rights to deny the patent for that reason alone.

f. Payment of Statutory Purchase Price per Acre

The final step in patenting a mining claim requires the claimholder to pay the statutorily set purchase price per acre, based upon the acreage approved for patent.²²² Following this payment, a final certificate, and later, a formal patent will be issued.²²³ Once the certificate is issued, no further assessment work is required because the process of patenting the claim transfers actual title over the surface and subsurface interests to the claimholder owner.²²⁴

In recent years, the U.S. has been increasingly less likely to issue such patented claims. The next section of this article discusses the trend against issuance of such patents.

219. See *Clouser v. Espy*, 42 F.3d 1522, 1530 (9th Cir. 1994); *United States v. Pittsburg Pac. Co.*, 84 Interior Dec. 282, 285 (IBLA 1977); PRUITT, *supra* note 3, at 17–18; 43 C.F.R. § 3860 (2006) (stating the statutory fee schedule as determined by BLM regulation and applying it to claimants).

220. See 30 U.S.C.A. § 612(a) (2012) (outlining the statutory scheme for unpatented mining claims).

221. See *id.* (forbidding additional use of the land by the claimant, such as removal of timber).

222. See *Patenting*, *supra* note 6 (authorizing the BLM to issue a patent, for a per-acre fee, upon proof of discovery and procedural compliance). Under current law, a patent applicant can purchase a lode claim at \$5 per acre and a placer claim at \$2.50 per acre.

223. See PRUITT, *supra* note 3, at 14 (describing the formal grant following the secretarial review).

224. See PRUITT, *supra* note 3, at 170 (rendering the BLM use requirements inapplicable).

C. Government Trend Against Patenting

Regardless of whether the claim patent process has been followed and all patent requirements have been met, the current likelihood of successfully obtaining a new patent is extremely small. Since the 1990s, the U.S. government has restricted opportunities to patent hard rock mining claims.²²⁵ For instance, many lands have been withdrawn from location. In 1993 the Secretary of the Department of Interior issued Order 3163, limiting final patent issuance authority to the Secretary of the Department of Interior, in part, as a means of slowing down the patent issuance process.²²⁶ Furthermore, the Interior and Related Agencies Appropriation Act of 1994 imposed a moratorium on the acceptance of new mineral patent applications.²²⁷ This moratorium has been extended by subsequent Interior Appropriations acts, and remains in effect today.²²⁸ Therefore, any current patent application will be immediately returned to the claimholder. However, the moratorium does not affect patent applications “filed with the Secretary” on the enactment date and otherwise valid.²²⁹ Therefore, the only real chance of currently obtaining a new patent is to: (1) show that the patent application was filed with the Secretary of the Department of the Interior in the Washington office prior to the enactment date of the moratorium; and (2) show that the Secretary has either failed to make a determination of the patent application, or wrongfully denied the patent application. Even if the patent approval was wrongfully delayed or denied, the government may still be able to deny a patent, although such denial could conceivably be considered to be a compensable actual and/or regulatory Fifth Amendment taking.²³⁰

225. See *Patenting*, *supra* note 6 (describing the push within the courts and Congress to limit the availability of patents).

226. See *Independence Mining Co. v. Babbitt*, 885 F. Supp. 1356, 1358, 1363 (D. Nev. 1995) (upholding the Secretary’s ability to delay patent consideration and issuance).

227. *Mining Claim*, *supra* note 7 (“[A]ll mineral patent applications received after October 1, 1994, until the moratorium expires, are to be returned to the applicant without further action.”).

228. See Sam Kalen, *An 1872 Mining Law for the New Millennium*, 71 U. COLO. L. REV. 343, 355 n.50 (2000) (describing the modernization of outdated mining laws by the current Department of the Interior).

229. See Pub. L. No. 103-332, § 112, 108 Stat. 2499, 2519 (1994) (setting forth the moratorium within Section 112 of Appropriations Act, thus withdrawing adequate funds from the program).

230. *But see Swanson v. Babbitt*, 3 F.3d 1348, 1353–54 (9th Cir. 1993) (upholding the government’s delay and withdrawal of rights). The Department of the Interior delayed making a determination on a claimholder’s patent application and withdrew the lands in issue subsequent to claimholder’s patent application. The Ninth Circuit ruled that the regulation effectively prohibiting the claimholder from patenting the claim did not constitute a compensable taking because no patent rights vested before that statute withdrawing the land was enacted.

Of course, for a grandfathered patent application to be accepted, the claimholder must presumably have properly taken all required steps in the original patent application process.²³¹ However, even in the absence of meeting all these requirements, a patent applicant may still be able to argue that the claimant has created a property interest in the claimed land.²³² The potential for establishing such vested rights in the claimed property is the subject of the next section of this article.

D. Patenting as a Vested Property Right

In certain circumstances, courts have held that an unpatented claimant has a vested property interest in the claim, even where the claim itself was defective in some way.²³³ For example, in *Cook v. United States*, the Court of Federal Claims held that the claimholder acquired a vested property right consisting of equitable title since the claimholder had complied with all statutory and regulatory requirements for a patent and the BLM had accepted the proffered purchase price (prior to patent application approval), even though the BLM had not yet determined the existence of a valuable deposit.²³⁴ In *South Dakota v. Andrus*, the Eighth Circuit held that issuance of a patent was a nondiscretionary, ministerial duty if the applicant met all patenting requirements.²³⁵ In *United States v. Shumway*, the Ninth Circuit held that issuance of a first half certificate gave rise to a presumption that the claimholder was entitled to a patent, but it was rebuttable upon a showing that the claimholder had “failed to comply with the mining laws.”²³⁶ Assuming such compliance, the claimholder had a vested right to the unpatented claim, even though the patent had not yet

231. See *R.T. Vanderbilt Co. v. Babbitt*, 113 F.3d 1061, 1066 (9th Cir. 1997) (denying the grandfather exception because the applicant had not fulfilled all requirements).

232. See *Benson Mining & Smelting Co. v. Alta Mining & Smelting Co.*, 145 U.S. 428, 433–34 (1892) (invoking the doctrine of equitable title to claim a property interest in the land in absence of fulfillment of requirements).

233. See, e.g., *Cook v. United States*, 37 Fed. Cl. 435, 439 (1997) (“[A]pplicants possessed vested right to receive patent covering land listed in patent application for which applicants satisfied statutory and regulatory requirements for issuance of patent.”); *United States v. Shumway*, 199 F.3d 1093, 1102 (9th Cir. 1999) (“It has long been established that if the applicants are in compliance with the mining laws, then their right to the unpatented claim . . . is vested even though the Department of the Interior has as yet taken no action at all on their application for a patent.”).

234. See *Cook*, 37 Fed. Cl. at 439 (explaining that the BLM’s failure to verify the existence of a valuable deposit was not a prerequisite to passage of equitable title since the claimholder had complied with all provisions with which the patent applicant could comply).

235. See *South Dakota v. Andrus*, 614 F.2d 1190, 1193 (8th Cir. 1980) (“[I]t is well established that the issuance of a mineral patent is a ministerial act.”).

236. *Shumway*, 199 F.3d at 1102 (citing 30 U.S.C. § 29 (1994)).

been formally issued.²³⁷ The *Shumway* court reasoned “[t]he owner of a mining claim owns property, and is not a mere social guest of the Department of the Interior to be shooed out the door when the Department chooses.”²³⁸

Other courts have not afforded unpatented claimants similar expectancy rights.²³⁹ In *R.T. Vanderbilt Co. v. Babbitt*, the Ninth Circuit held that an applicant did not fit within the grandfather exception to the moratorium because the applicant did not tender payment of the purchase price before the effective date of that exception.²⁴⁰ In *Freese v. United States*, the Court of Federal Claims held that the right to patent a valid unpatented claim is only an expectancy right, which may be cut off without compensation by Congress.²⁴¹ According to the *Freese* court, all the plaintiff lost was the option to apply for a greater property interest.²⁴² In *Swanson v. Babbitt*, the government delayed making a determination on a claimholder’s patent application and withdrew the lands in issue subsequent to claimholder’s patent application.²⁴³ The Ninth Circuit ruled that the regulation effectively prohibiting the claimholder from patenting the claim did not constitute a compensable taking because no patent rights vested before that statute withdrawing the land was enacted.²⁴⁴ Similarly, in *Independence Mining Co. v. Babbitt*, the Ninth Circuit held that vested rights do not arise before the Secretary has decided whether to contest a patent claim.²⁴⁵ The *Independence Mining* court explained that issuance of a patent is not a mere ministerial act because the determination of validity requires the exercise of judgment and discretion to assess the results of the mineral examination for the existence of value.²⁴⁶

237. *Shumway*, 199 F.3d at 1103 (citing *Bradford v. Morrison*, 212 U.S. 389, 394–95 (1909)).

238. *Shumway*, 199 F.3d at 1103.

239. *See R.T. Vanderbilt Co. v. Babbitt*, 113 F.3d 1061, 1066 (9th Cir. 1997) (“The fact that Vanderbilt’s application was ‘complete’ when filed does not necessarily mean it ‘fully complied’ with all the statutory requirements referred to in the second prong of section 113.”).

240. *See id.* (holding that, since Vanderbilt had not fully complied, it did not fall within the exception).

241. *See Freese v. United States*, 639 F.2d 754, 755 (Ct. Cl. 1981) (stating that the plaintiff had no vested property right in patenting an unpatented claim).

242. *See id.* at 758 (“At best, plaintiff has suffered a denial of the opportunity to obtain greater property . . .”).

243. *See Swanson v. Babbitt*, 3 F.3d 1348, 1354 (9th Cir. 1993) (explaining the government’s delay in responding to the application).

244. *See id.* at 1354–55 (stating that the SNRA prohibition on future patents was not a deprivation of Swanson’s property interest).

245. *See Independence Mining Co. v. Babbitt*, 105 F.3d 502, 508 (9th Cir. 1997) (“[N]o rights can vest before the Secretary has decided whether to contest the patent claim.”).

246. *See id.* at 508–09 (explaining why patent issuance is more than a ministerial act).

Given the uncertainty in the traditional patenting process (as outlined above), it is prudent to seek an alternative route to achieving a patented claim. A limited alternative to the traditional federal claim patenting process, only available to placer claims, is discussed immediately below.

E. A Limited Alternative to the Traditional Patenting Process

Section 38 of the General Mining Law provides another path to patenting placer mining claims.²⁴⁷ Section 38 provides,

[w]here such person[s] . . . have held and worked their claims for a period of time equal to the time prescribed by the statute of limitations of the state . . . where the same may be situated, evidence of such possession and working of the claims for such period shall be sufficient to establish a right to a patent thereto²⁴⁸

However, as noted above, the scope of Section 38 is limited, only applying to placer claims that the claimant has “worked” and “held” for the requisite period.²⁴⁹ Most truly valuable claims occur in lode form (hence the term “mother lode”).²⁵⁰ Furthermore, any claim that actually has been worked for ten years very likely would qualify for a patent under the conventional tests.²⁵¹ However, a chance exists that a placer claim would contain enough loose particles or nuggets to be considered truly valuable yet was not patented in the traditional manner prior to government enforcement action.²⁵²

Regardless of the method for making a patent application, it is always possible (if not likely these days) that the government will deny the application. The last part of Section IV (below) provides a brief description of the procedural actions that must be taken by a claimholder where there

247. See 30 U.S.C.A. § 38 (2013) (explaining the process for patenting placer mining claims).

248. *Id.*

249. *Id.*

250. See Forest Service, *Anatomy of a Mine from Prospect to Production*, U.S.D.A. 1, 5, (Feb. 1995), available at http://www.fs.fed.us/geology/anatomy_mine.pdf (explaining the difference between lode deposits claims and placer claims).

251. See PRUITT, *supra* note 3, at 13 (outlining the requirements for certification of a valid patent on a mining claim).

252. See BUREAU OF LAND MGMT., *Mining Claims and Sites on Federal Land*, 1, 27 (May 2011), available at http://www.blm.gov/pgdata/etc/medialib/blm/wo/MINERALS_REALTY_AND_RESOURCE_PROTECTION_energy.Par.28664.File.dat/MiningClaims.pdf (explaining the process of obtaining patents for the various types of claims).

has been a denial of a patent claim and the claimant wishes to challenge the denial.

F. Mineral Patent Adjudication in General

When the government challenges the sufficiency of a claim's patent application, an administrative trial must be held, as well as any appeals.²⁵³ Court and administrative decisions have grown progressively tighter, particularly on the issue of what qualifies as a "discovery."²⁵⁴ As discussed in Section V, *infra*, the progressively tighter decisions have made many valuable mineral deposits no longer patentable, or even locatable as an unpatented mining claim.²⁵⁵ The tighter rulings have caused many claimholders, even prior to the patent moratorium, to be reluctant to expose their claims to the increased governmental scrutiny involved in the mining claim patent process.²⁵⁶ However, when claimholders have sought a patent to federal land and have been invalidly denied such a patent, the claimholder must seek judicial relief within six years of the denial or lose the right to judicial review.²⁵⁷

V. A Trap for the Unwary in Relation to Validating Unpatented Mining Claims and Exercising Vested Rights in Claims Thought to be Ripe for Patent

This section examines a hidden trap for the unwary mining claimholder that may be employed by the federal government, going forward, to invalidate unpatented claims and justify previous patent application denials. For decades, federal agencies essentially ignored several provisions of federal mining law that could severely limit the ability of modern miners to effectively operate for profit on federal lands, including the discovery requirement, use limitations, and the mine-to-mill site provision.²⁵⁸ Individually, each of these provisions is relatively

253. See PRUITT, *supra* note 3, at 13 ("The claim may be challenged by the government for lack of a sufficient discovery or other deficiency, in which event an administrative trial may be held, with appeals.").

254. See PRUITT, *supra* note 3, at 14 ("Courts and administrative decisions have progressively tightened the interpretation of what qualifies as a 'discovery' for a valid mining claim.").

255. See PRUITT, *supra* note 3, at 14 (describing the increasing difficulties in patenting mining claims).

256. See PRUITT, *supra* note 3, at 14 ("Many claim owners are reluctant to expose their claims to the scrutiny of government officials and the challenges which can arise when the patent application is published.").

257. See *Sette v. United States*, 42 Fed. Cl. 37, 39 (1998) ("Every claim of which the United States Court of Federal Claims has jurisdiction shall be barred unless the petition thereon is filed within six year after such claim first accrues.") (citing 28 U.S.C. § 2501).

258. See *Crown Jewel*, *supra* note 2, at 820 (outlining the three ignored provisions).

significant; however, the true strength of these provisions lies in their cumulative effect.²⁵⁹ According to scholar Nicole Rinke, “[t]aken together, these provisions serve as a built-in alarm clock—set to go off when mining on federal land loses its luster.”²⁶⁰ In recent years, the federal government has severely tightened its willingness to part with federal public domain lands.²⁶¹ Going forward, the federal government will likely use the following provisions—the valuable discovery requirement, the use limitations, and the mine-to-mill site provisions (each individually addressed in greater detail immediately below)—in concert, to thwart unwanted modern miners.²⁶²

A. Valuable Discovery Requirement

The present valuable discovery requirement (previously discussed *infra*) is the greatest single modern hurdle to the validation of an unpatented claim and/or patenting of a mining claim.²⁶³ The General Mining Act of 1872 requires the discovery of a present valuable mineral deposit.²⁶⁴ Discovery means “the actual physical disclosure²⁶⁵ of a valuable mineral deposit” (which, as noted above, may be made either through physical unearthing or geological inference, depending on the authority).²⁶⁶ The U.S. Supreme Court has also held that in order to qualify as a valuable mineral deposit, “it must be shown that the mineral can be ‘extracted, removed,

259. See *Crown Jewel*, *supra* note 2, at 820 (“While each is significant in its own right, the real force of these limitations lies in their cumulative effect.”).

260. See *Crown Jewel*, *supra* note 2, at 820.

261. See *Crown Jewel*, *supra* note 2, at 839 (“Federal land management policies no longer support sweeping developments of federal lands.”).

262. See *Crown Jewel*, *supra* note 2, at 822 (explaining the emergence of the three provisions and their use in limiting federal land use for mining).

263. See PRUITT, *supra* note 3, at 10–14 (describing the process of obtaining a valid patent on a mining claim).

264. See *Lara v. Sec’y of the Interior*, 820 F.2d 1535, 1542 (9th Cir. 1987) (“The government bears the initial burden of presenting a prima facie case that the claims are invalid [and then] [t]he burden . . . shifts to the claimant to show by a preponderance of the evidence that a valuable mineral deposit has been discovered.”).

265. The process of locating a mining claim does not necessarily mean that a discovery has been made. See *Ranchers Exploration & Dev. Co. v. Anaconda Co.*, 248 F. Supp. 708, 714 (D. Utah 1965) (“A mineral discovery upon a claim is the sine qua non for its validity . . . [t]o constitute a mineral discovery, something more than conjecture, hope or even indication of mineralization is essential.”). In *Cole v. Ralph*, the Supreme Court held that location involves marking the boundaries of a claim, but confers no rights in the absence of a discovery (i.e. disclosure of presently valuable deposit). See *Cole v. Ralph*, 252 U.S. 286, 296 (1920) (“Location is the act or series of acts whereby the boundaries of the claim are marked . . . but it confers no right in the absence of discovery, both being essential to a valid claim.”).

266. See *Ranchers Exploration & Dev. Co.*, 248 F. Supp. at 714–15 (describing the various types of mineral discoveries).

transported, and marketed at a profit—the so called ‘marketability test.’²⁶⁷

B. Use Limitations

The General Mining Act of 1872 requires that the surface of mining claim land only be used for purposes incident to the extraction of minerals from that claim.²⁶⁸ In *Teller v. United States*, the Eight Circuit reasoned that abusive land appropriations would become widespread if mining claimants were able to use a mining claim for any purpose other than those purposes that are incident to the extraction of minerals.²⁶⁹ Mining claims may only be used for purposes incident to mining, and the disposal of waste created by mining is not considered a purpose incident to mining.²⁷⁰

C. The Mine-to-Mill Site Ratio

Mill site claim lands are not subject to the same use restrictions as are lode or placer claim lands.²⁷¹ Mill sites are created for the purposes of smelting and processing minerals,²⁷² so some waste may be disposed upon mill site claim lands.²⁷³ However, the use of mill site claims is practically limited in size to a modest mining-to-mill site claim lands ratio of over 4:1 because lode claims have historically been made for 10.331 acre areas and mill site claims are limited to an area of five acres per claim.²⁷⁴

267. *United States v. Coleman*, 390 U.S. 599, 600 (1968).

268. *See Rinke*, *supra* note 2, at 820–21 (expanding on the mineral removal purposes as dictated by the General Mining Act of 1872); *see also Teller v. United States*, 113 F. 273, 280 (8th Cir. 1901) (explaining that a mining claim allows for the holder to work the land, but to do nothing more to the land than is required for surface mining).

269. *See Teller*, 113 F. 273 at 282 (suggesting the different ways in which Mullison might have abused his mining claim if Congress had left the door open to other uses).

270. *See Crown Jewel*, *supra* note 2, at 824–25 (explaining that available waste management on mining land is necessarily limited); *see also* 30 U.S.C. §§ 612(a)–(c) (2012) (limiting the lawful activities on unpatented claims to prospecting, mining, or processing operations and uses reasonably incidental thereto, not including waste disposal).

271. *See Crown Jewel*, *supra* note 2, at 824 (differentiating mill sites from placer and lode sites based on their regulation).

272. *See Crown Jewel*, *supra* note 2, at 824 (stating the reasons why millsites are created).

273. *See Crown Jewel*, *supra* note 2, at 825 (describing the small scale of mill sites when the General Mining Act of 1972 was enacted, allowing for some waste disposal).

274. *See Crown Jewel*, *supra* note 2, at 824 (stating the ratio of millsite-to-mining claims). Some non-compliant mill sites have enjoyed special protection. For instance, in 1999, Representative Ralph Regula (R-OH) attached a rider to the Kosovo Emergency Supplemental Appropriations that postponed enforcement of the mill site provision until the end of the fiscal year and directed the Departments of Interior and Agriculture to approve a large gold mining project in Washington State. *See* S. 544, 106th Cong. (1999) (describing the history of the Interior Appropriations Bill). Congress has since allowed some mines to proceed with operations in violation of the use and/or mill site provisions, but agreed to

D. Combined Effects of the Valuable Discovery Requirement, Use Limitation, and Mine-to-Mill Site Ratio As They Relate to Modern Mining Practice

The current reality of mining practice is that only low-grade deposits of significantly inferior quality, or high-grade deposits that are difficult (and hence expensive) to extract, are mined—all other profitable deposits have likely long since been tapped.²⁷⁵ Deposits that are low-grade and/or deep and difficult to extract require massive infrastructure and produce significantly more waste than their high-grade counterparts.²⁷⁶ The mining industry currently uses the process of mechanization for low-grade deposits, which involves the handling of large tonnage amounts of overburden or ore.²⁷⁷ Mechanization requires large plant facilities on the surface and produces a disproportionate amount of waste.²⁷⁸ The surface areas of federal mill site claims are simply not large enough to house mechanization facilities for claims representing a traditional ratio of over 4:1 in comparison to the size of the mill site claims.²⁷⁹ The use of heavy deep-drilling machinery generally needed to reach any remaining high-grade deposits obviously takes up significant surface area and produces significant additional waste as well.²⁸⁰

Offsite waste disposal can be extremely expensive,²⁸¹ which would significantly increase the costs of extracting, processing, and selling the

apply the mill site provision prospectively to all new mines proposed after November 7, 1997. See Anti-Environmental Mining Riders and the 2nd Session of the 106th Congress, MINEWIRE at 2 (Mineral Policy Center, Wash., D.C.) (March 3, 2000) (laying-out the rules for mines created since November 7, 1997).

275. See *Crown Jewel*, *supra* note 2, at 825, n.36 (explaining that only low-quality or hard-to-reach minerals remain unmined).

276. See, e.g., T. H. Watkins, *Mining's Hard Rock Legacy*, NAT'L GEOGRAPHIC, <http://science.nationalgeographic.com/science/earth/inside-the-earth/hard-rock/#page=1> (last visited Feb. 11, 2013) (describing the destruction caused by surface mining) (on file with the Washington and Lee Journal of Energy, Climate and the Environment).

277. See Roger Flynn, *Land and Water Division: The 1872 Mining Law as an Impediment to Mineral Development on the Public Lands: A 19th Century Law Meets the Realities of Modern Mining*, 34 Land & Water L. Rev. 301, 304 (1999) (describing the process and purposes of mechanization).

278. See *id.* at 303 (discussing the requirement of larger areas for plant facilities). The EPA claimed in its annual report for 1998 that the U.S. mining industry produces more waste than all other U.S. industries combined. See *Crown Jewel*, *supra* note 2, at 826 (stating the findings of the 1998 EPA annual report).

279. See Flynn, *supra* note 277, at 303 (“The surface areas of mining claims and mill sites are no longer adequate for [the mining industry’s current processes of mechanization and utilization].”).

280. See Flynn, *supra* note 277, at 305 (describing the changes in mining today as compared to mining when the Mining Act was enacted).

281. See Flynn, *supra* note 277, at 303 (explaining the cost and increase of waste disposal areas in mining today).

minerals on an open market.²⁸² If offsite waste disposal requirements increase costs to a prohibitive amount—making the deposit no longer considered presently valuable—then the amount of waste an operation can produce is necessarily limited to the amount of waste disposable on corresponding mill site claim lands.²⁸³ Five-acre mill site claims would generally be unable to support the waste of a corresponding 10.331 acre lode claim, particularly given the large amounts of waste produced by mechanization and deep-drilling processes.²⁸⁴ A mining claim may be invalidated where the methods of extraction produce more waste than can be disposed of onsite (with such onsite disposal restricted by the use limitations and mine-to-mill site provisions) and the costs of offsite waste disposal for the remainder of the waste renders the operation unprofitable, and thus, in violation of the discovery requirement.²⁸⁵ It is likely that only an untapped high-grade motherlode, which has yet to be reached due to its depth, would be able to utilize a proper economy of scale to reduce the relative costs of extraction and regulatory compliance per unit of mineral deposit, to demonstrate the present value requirement.²⁸⁶ Given this result, it makes sense to explore whether a loophole exists that would avoid this issue (discussed immediately below).²⁸⁷

E. Limited Loophole to Enforcement of the Valuable Discovery, Use, and Mine-to-Mill Site Provisions

Claimholders may have a limited opportunity to avoid application of the combined valuable discovery, use, and mine-to-mill site provisions by reducing the size of lode claims, thereby increasing the relative percentage of total land available for mill site land.²⁸⁸ However, the use of a lode acreage reduction strategy to increase the relative percentage of mill

282. See *United States v. Coleman*, 390 U.S. 599, 600 (1968) (stating that the cost of extracting the minerals cannot be more than their value on the open market).

283. See, e.g., *Lara v. Sec’y of the Interior*, 820 F.2d 1535 (9th Cir. 1987) (describing the present value and marketability requirements for mining operations to remain open); see also *Crown Jewel*, *supra* note 2, at 824–25 (laying out the ways in which the area available for waste management is limited, with the 4:1 ratio of mining to mill site acres).

284. See *Crown Jewel*, *supra* note 2, at 854 (describing why the 4:1 ratio of mining to mill sites exists).

285. See *Coleman*, 390 U.S. at 602 (explaining that if the cost of extraction and transportation is less than the value of the minerals, then the minerals do not meet the discovery requirement).

286. See *Coleman*, 390 U.S. at 603 (stating that mining operations are required to have a present showing of profits).

287. See *Crown Jewel*, *supra* note 2, at 833 (laying out the two main loopholes for miners).

288. See *Crown Jewel*, *supra* note 2, at 833 (describing the two alternatives that create loopholes for miners).

site claim lands may face some potential challenges (described in greater detail below).²⁸⁹ The General Mining Act states that a lode claim may be equal to, but shall not exceed, 10.331 acres.²⁹⁰ This provision does not set a minimum acreage requirement upon lode claims.²⁹¹ However, traditional practice is to patent claims at 10.331 acres.²⁹²

If a prospector can effectively limit the size of each individual lode claim, the prospector may be able reduce the mining to mill site claim acreage ratio.²⁹³ Decreasing this ratio would allow a greater percentage of total federal land to be reserved for mill sites, which are not subject to the same strict use limitations as mining claim lands.²⁹⁴ An increased percentage of mill site claims would render more federal land available for waste disposal, making the mining operations once again economically valuable.²⁹⁵ However, the increased costs of filing and maintaining extra sub-divided claims would have to be factored into an assessment of claim value.²⁹⁶ Obviously, this proactive planning strategy would only help acquire an unpatented mining claim, since such planning could not be done retroactively to take effect prior to the enactment of the patent application moratorium.²⁹⁷ There are several pitfalls in undertaking the above lode claim acreage limitation strategy, several of which are described in the next section of this article.²⁹⁸

1. Potential Problems Involved With Strategies Limiting the Acreage of Lode and/or Placer Claims

The federal government may challenge a lode claim acreage

289. See *Crown Jewel*, *supra* note 2, at 834 (explaining the problems with attempting to decrease lode claim size in order to increase mining capacity).

290. See *Lara v. Sec'y of the Interior*, 820 F.2d 1535, 1539 (9th Cir. 1987) (providing details to the dimensions of lode claims).

291. See *id.* (stating that there is no right to the maximum claim if the entire tract does not contain minerals).

292. See, e.g., *id.* (providing the maximum length of a lode claim in conjunction with the width from either side of the claim); see also *Crown Jewel*, *supra* note 2, at 833 (reiterating the description of a maximum lode claim).

293. See *Crown Jewel*, *supra* note 2, at 833 (explaining the effect of limiting lode claim size).

294. See *Crown Jewel*, *supra* note 2, at 833–34 (explaining how reducing the size of the lode claim can increase the acreage mineable on mill site claims).

295. See, e.g., *Lara*, 820 F.2d at 1535 (describing the importance of profit and marketability in making lode and placer claims).

296. See *United States v. Coleman*, 390 U.S. 599, 602 (1968) (laying out the factors in the “prudent man test” to determine marketability).

297. See *Crown Jewel*, *supra* note 2, at 821 (describing the different types of claims that prospectors may make).

298. See *Crown Jewel*, *supra* note 2, at 830 (putting forth the possibility that valuable ore might end up buried under piles of waste rock).

reduction strategy in a number of ways.²⁹⁹ One way to make such a challenge would be based on the effect that upholding it would have on other relevant statutory provisions.³⁰⁰ In *Boise Cascade Corp. v. EPA*, the Ninth Circuit held that statutory provisions of the Federal Water Pollution Act Amendments of 1972 (the “Clean Water Act”) must be interpreted as a whole, giving effect to each word and making every effort not to interpret provisions in a manner that renders other provisions of the statute inconsistent, meaningless, or superfluous.³⁰¹ It could be similarly argued that the use and mine-to-mill site limitations would be rendered superfluous if claimants were able to avoid the application of the provisions by establishing small lode claims to artificially reduce the mine-to-mill site ratio.³⁰²

A second way to make this challenge is to apply case law precedent relating to form over substance in the area of federal land grants.³⁰³ In *Leavenworth v. United States*, the U.S. Supreme Court generally expressed doubt that genius statutory interpretation or tactical maneuvers against industry norms and standards could be validly used as a means of expanding federal land grants.³⁰⁴ Furthermore, ingenuity of contractual expression was not permitted to thwart the Congressional intent to restrict federal land grants in *United States v. City & Cnty. of San Francisco*.³⁰⁵ The use of artificially small lode claims to thwart the invalidating impact of mining waste disposal requirements may similarly be found to be an invalid tactical maneuver against industry norms made in an attempt to expand federal land grants.³⁰⁶

In addition to the above, the U.S. could use the concept of good faith as a third means to challenge the lode claim acreage reduction strategy.³⁰⁷ The General Mining Act implies a good faith requirement.³⁰⁸ Tactical maneuvers, such as limiting the size of lode claims to effectively

299. *Crown Jewel*, *supra* note 2, at 828 (explaining why the Crown Jewel Project was rejected when trying to use the mining loophole).

300. *See* *Boise Cascade Corp. v. EPA*, 942 F.2d 1427, 1429 (9th Cir. 1991) (giving the Clean Water Act as an example).

301. *See, e.g., id.* (explaining that the Clean Water Act had to be applied in full).

302. *See* *Crown Jewel*, *supra* note 2, at 835 (stating that the limit on lode claims would be rendered meaningless if it were not upheld).

303. *See* *Crown Jewel*, *supra* note 2, at 833 (laying out the second loophole to the acreage maximum for lode claims).

304. *See* *Leavenworth v. United States*, 92 U.S. 733, 740 (1875) (explaining that what is not expressly given cannot be implied).

305. *See* *United States v. City & Cnty. of San Francisco*, 310 U.S. 16, 28 (1940) (stating that a company cannot contract out of Section 6 of the Act).

306. *See* *Leavenworth*, 92 U.S. at 740 (reiterating that a company cannot tactically find a way around the law).

307. *See* *Ranchers Exploration & Dev. Co. v. Anaconda Co.*, 248 F. Supp. 708, 728–29 (1965) (stating that there exists a requirement of good faith in mining and mill site claims).

308. *See id.* (reiterating the requirement of good faith).

reduce the mining to mill site ratio, could conceivably be found to violate the requirement of good faith.³⁰⁹ Violation of the good faith requirement could be used to invalidate claims.³¹⁰ However, bad faith may be difficult to prove when the claimant has not been shown to have originally located normal sized claims and subsequently relocated smaller claims for the purposes of establishing additional mill sites.³¹¹

The cumulative effect of all these potential challenges is to make the lode claim acreage reduction strategy a difficult one to sustain.³¹² For example, the U.S. may invalidate a mining claim where waste from onsite extraction methods generate high enough costs that the operation becomes unprofitable in violation of the discovery requirement.³¹³ However, the U.S. has a much more potent and sweeping method for eliminating unpatented mining claims—the Antiquities Act (discussed immediately below).³¹⁴

VI. Constitutionality of the Antiquities Act

A. Antiquities Act Use Against Unpatented Mining Claims

As previously noted, the federal government has gradually tightened the requirements for patenting mining claims, including a recent moratorium on the acceptance of patent applications.³¹⁵ Therefore, today

309. See *United States v. Nogueira*, 403 F.2d 816, 823 (9th Cir. 1968) (“[A]n attempted location for any other purpose than [mining or extracting minerals] is wholly void.”).

310. See *id.* at 824 (“[T]he district court had jurisdiction to pass on the good faith or lack of good faith in the filing of a mining claim . . .”).

311. See JOHN D. LESHY, *THE MINING LAW: A STUDY IN PERPETUAL MOTION* 62–63 (1987) (discussing the subjective nature of assessing good faith); See Flynn, *supra* note 277, at 334 (“Again faced with the realities of the Mining Law, in September and October of 1998, GIC attempted to bypass the millsite acreage and ratio limits by changing its approximately 46 lode claims covering the pit areas into approximately 187 lode claims.”).

312. See *Boise Cascade Corp. v. EPA*, 942 F.2d 1427, 1431–32 (9th Cir. 1991) (“Under accepted canons of statutory interpretation, we must interpret statutes as a whole, giving effect to each word and making every effort not to interpret a provision in a manner that renders other provisions of the same statute inconsistent, meaningless or superfluous.”); *United States v. City & Cnty. of San Francisco*, 310 U.S. 16, 28 (1940) (“Mere words and ingenuity of contractual expression, whatever their effect between the parties, cannot by description make permissible a course of conduct forbidden by law.”); *Nogueira*, 403 F.2d at 823 (“We therefore hold that an attempted location for any other purpose than that thus specified, is wholly void.”).

313. See *Hjelvik v. Babitt*, 198 F.3d 1072, 1076 (9th Cir. 1999) (noting that the District Court did not err in finding that the costs outweighed the profitability in this case).

314. See *infra* notes 398–99 (discussing application of the Antiquities Act in unpatented mining claims).

315. See *Mining Claim*, *supra* note 7 (“The Interior and Related Agencies Appropriation Act of 1994 included a moratorium on the acceptance of new mineral patent applications [which] was in effect October 1, 1994, through September 30, 1995 [and] has been extended by subsequent Interior Appropriations Acts.”).

unpatented mining claims abound all over the West.³¹⁶ The federal government has signaled an intent to more strictly enforce the valuable discovery requirement, use limitations, and mine-to-mill site provisions, which will have the effect of invalidating the interests of many unpatented claimholders (sometimes for failing to maintain a valuable discovery in prior years under the Marketability Test).³¹⁷ As such, unpatented claimholders who believe that their claims were previously economically unviable, but became viable due to rising commodity prices, may need to relocate their claims to pre-empt such a retroactive government claim invalidation argument.³¹⁸

The federal government likely realizes that most of the currently located unpatented mining claims may be invalidated under the Marketability Test, perhaps even retroactively if necessary, especially in light of applicable onerous environmental regulations.³¹⁹ The federal government also likely understands that many prospectors may try to relocate claims on these deposits, perhaps even using artificially small lode claims to decrease the mine-to-mill site ratio, to effectively lower cost and increase the minerals' value under the Marketability Test.³²⁰ As commodity prices rise (such as gold),³²¹ the federal government may move to protect its interest in valuable minerals not subject to currently valid mining claims. In order to prevent the relocation of potentially valid and valuable mining claims,³²² the federal government may seek to have these federal lands withdrawn from the location of mining claims.³²³

316. See PRUITT, *supra* note 3, at iii (noting that mining laws apply only to thirteen Western states and Alaska, and that mining claims persist in those places).

317. See *Crown Jewel*, *supra* note 2, at 824 (“Operating in conjunction, these three aspects of the 1872 Mining Law—the ‘valuable discovery requirement,’ the mine-millsite ratio, and the use restriction imposed on each—serve to severely limit the mining of exceptionally low-grade ore bodies on federal lands.”).

318. See *Crown Jewel*, *supra* note 2, at 825 (detailing a greater intent to enforce the valuable discovery requirement, which would make it harder for claimholders to prevail as they once did).

319. See *Crown Jewel*, *supra* note 2, at 826 (noting that, although the DOI is conscious of environmental impacts of mining, the agency is no less reluctant to endorse mining on federal lands).

320. See *Crown Jewel*, *supra* note 2, at 835 (noting that the IBLA has permitted the aggregation of adjacent claims in order to pass the Marketability Test).

321. See *Historical Gold Prices*, *supra* note 5 (noting that, from 2005 to 2013, the price of gold more than tripled); Shumsky, *supra* note 5 (same).

322. See *supra* Part V.E (providing an analysis of strategies that limit the mine-to-mill site ratio in order to produce claims that may be considered of marketable value).

323. See *Cameron v. United States*, 252 U.S. 450, 455 (1920) (stating that to assert a post-withdrawal mining claim within the Antiquities Act, the discovery of such mining claim must have preceded the land's withdrawal, but that the determination of whether there was a requisite discovery is a question of fact).

One of the federal government's most powerful federal land withdrawal tools is the declaration of national monuments—such as mountains or buttes—under the Antiquities Act of 1906 (hereinafter “Antiquities Act”).³²⁴ The Antiquities Act authorizes the President of the United States, in his discretion,

to declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated upon the lands owned or controlled by the Government of the United States to be national monuments, and may reserve as a part thereof parcels of land, compatible with the proper care and management of the objects to be protected.³²⁵

Practically speaking, the Antiquities Act authorizes the President to restrict by executive order the use of particular public land owned by the federal government.³²⁶ The following section will discuss the constitutionality of the government's likely reaction—the use of the Antiquities Act to withdraw federal public domain land before a mining claim can be successfully relocated. A constitutional challenge may be made either facially or as applied—both are discussed below.³²⁷

B. Facial and As Applied Unconstitutionality Arguments

If a U.S. President attempts to prevent the successful relocation of claims by withdrawing valuable land from relocation (presumably in a time of rising commodity prices), a plaintiff claimholder may argue that the Antiquities Act is both facially unconstitutional and unconstitutional as applied.³²⁸ A plaintiff claimholder may argue that the Antiquities Act is facially unconstitutional because: (1) the penal provisions of the Antiquities Act are vague and uncertain³²⁹ and/or (2) the President is given unfettered discretion to declare a monument in violation of the non-delegation doctrine of the Property Clause of the United States Constitution.³³⁰

324. See American Antiquities Act of 1906, 16 U.S.C. §§ 431–33 (2013) (giving the president authority to declare lands as national monuments).

325. *Id.*

326. See generally *id.*

327. See *infra* Part VI.B.

328. See *infra* notes 413–432 and accompanying texts.

329. See *United States v. Smyer*, 596 F.2d 939, 940–41 (10th Cir. 1979) (addressing the constitutionality of the Antiquities Act as the defendant argues that it is vague and uncertain).

330. See *Utah Ass'n of Cntys. v. Bush*, 316 F. Supp. 2d 1172, 1190 (D. Utah 2004) (“Plaintiffs contend that Congress violated both the delegation doctrine . . . and the Property Clause by giving the President, under the Antiquities Act, virtually unfettered discretion to regulate and make rules concerning federal property.”).

Some commentators have argued that the use of the words “ruin,” and “object of antiquity” in the penal provisions of the Antiquities Act are unconstitutionally vague.³³¹ However, in *United States v. Smyer* and *United States v. Diaz*, courts found that the penal provisions of the Antiquities Act were not unconstitutionally vague because common understanding and practice measure the statute’s language.³³² Commentators have also argued that the Antiquities Act gives the President unfettered discretion in declaring a monument, in violation of the non-delegation doctrine of the Property Clause.³³³ Congress may delegate its express authority under the Constitution’s Property Clause to dispose of and make all needful rules and regulations respecting the Territory or other Property belonging to the United States, so long as Congress provides standards to guide the authorized action such that one reviewing the action could recognize whether the will of Congress has been obeyed.³³⁴ The plaintiffs in *Utah Ass’n of Cnty. v. Bush*, an association of counties, contended that Congress violated the non-delegation doctrine of the Property Clause by giving the President virtually unfettered discretion, under the Antiquities Act, to regulate and make rules concerning federal property.³³⁵ However, the *Utah Ass’n of Cnty.* court held that the Antiquities Act authorizing the President “in his discretion” to establish national monuments upon government lands was facially constitutional.³³⁶ The court determined that the Antiquities Act did not violate the non-delegation doctrine of the Property Clause because the Antiquities Act sets forth clear standards and limitations as to the size of

331. See 16 U.S.C. § 433 (“Any person who shall appropriate, excavate, injure, or destroy any historic or prehistoric ruin or monument, situated on lands owned or controlled by the U.S. Government . . . shall, upon conviction, be fined . . . imprisoned . . . or both . . .”); *Smyer*, 596 F.2d at 941 (“The claim of vagueness and uncertainty is based on the use in the statute of the words ‘ruin,’ and ‘object of antiquity.’”).

332. See *Smyer*, 596 F.2d at 941 (finding that the Antiquities Act is not unconstitutionally vague); *United States v. Diaz*, 499 F.2d 113, 115 (9th Cir. 1974) (same).

333. See Roberto Iraola, *Proclamations, National Monuments, and the Scope of Judicial Review Under the Antiquities Act of 1906*, 29 WM. & MARY ENVTL. L. & POL’Y REV. 159, 161 (2004) (noting that some critics maintain that the Antiquities Act delegates an unconstitutionally broad amount of power).

334. See U.S. CONST. art. IV, § 3, cl. 2 (“The Congress shall have Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States.”).

335. See *Utah Ass’n of Cnty.*, 316 F. Supp. 2d at 1176 (alleging that the Antiquities Act is unconstitutional because it violates the delegation doctrine, and plaintiffs claim that only Congress has the authority to withdraw such lands from the federal trust); U.S. CONST. art. IV, § 3, cl. 2.

336. See *Utah Ass’n of Cnty. v. Bush*, 316 F. Supp. 2d 1172, 1191 (D. Utah 2004) (noting that Congress did not violate the Constitution by delegating in broad terms).

such monuments, as well as the types of objects that may be included in national monuments.³³⁷

The *Utah Ass'n of Cntys.* court also held that judicial review of the President's exercise of delegated discretion to designate a monument (and withdraw land under the Antiquities Act) Therefore, in *Utah Ass'n of Cntys.*, even though the President's Proclamation of the Grand Staircase National Monument in Utah involved an immense 1.7 million acres of federal land, the court had no right to determine that the President did not act pursuant to his delegated discretion under Property Clause and the Antiquities Act.³³⁸ However, the *Utah Ass'n of Cntys.* court also held that, although the court may not second-guess the reasons underlying the President's exercise of delegated discretion to withdrawal land under the Antiquities Act, the court may still determine whether the President's withdrawal Proclamation satisfied the Spending Clause of the United States Constitution and other relevant federal law (see below).³³⁹ For these reasons, the federal government is likely to overcome an argument that the Antiquities Act is facially unconstitutional.

A plaintiff claimholder may also challenge the Antiquities Act as unconstitutional as applied where the President's land withdrawal Proclamation exceeds the President's powers under the Spending Clause of the United States Constitution.³⁴⁰ The *Utah Ass'n of Cntys. v. Bush* court held that the President's withdrawal of the monument at issue did not violate the Spending Clause because no federal monies were expended to acquire *private* land.³⁴¹ Therefore, where no federal monies are expended to acquire private land and all federal laws are complied with, a President's Proclamation to withdraw land pursuant to the Antiquities Act is also unlikely to be found constitutional as applied.³⁴² In addition to the above constitutional issues, courts have also developed case law on another such challenge by claimholders—the Takings Clause of the Fifth Amendment to the U.S. Constitution (discussed immediately below).³⁴³

337. *See id.* (“The Act describes the types of objects that can be included in national monuments and a limitation on the size of monuments.”).

338. *See id.* at 1184 (emphasizing that court did not have the authority to review the President's decision in this instance).

339. *See id.* at 1191 (determining whether or not the Spending Clause was violated in this case).

340. *See id.* at 1177 (alleging a Spending Clause violation).

341. *See id.* at 1191 (concluding that nothing in the Proclamation supported the plaintiff's contention that federal monies were expended to acquire private land and that they, therefore, had no support for their contention of a Spending Clause violation).

342. *See generally id.*

343. *See infra* Part VII.

VII. Fifth Amendment Takings

A. In General

The Takings Clause of the Fifth Amendment to the U.S. Constitution prohibits the United States government from taking private property for public use without “just compensation.”³⁴⁴ A compensable taking of private property may occur where the government burdens an individual's property for the perceived benefit of society—where fairness and justice dictates that society itself should bear the burden.³⁴⁵ To show a taking that merits compensation, a plaintiff must show a substantial financial loss.³⁴⁶ The Tucker Act grants the United States Court of Federal Claims jurisdiction to entertain non-tort Constitution-based suits for money.³⁴⁷ A taking may occur by physical occupation/invasion or by governmental regulation of private property.³⁴⁸ A physical occupation/invasion of a private property interest by the federal government may be found to constitute an actual taking.³⁴⁹ Government regulation of private property interests could also rise to the level of a compensatory regulatory taking.³⁵⁰ Both actual and regulatory takings will be discussed in greater detail below.

1. Actual Taking

An actual taking refers to the non-temporary physical appropriation of the possession and use of private property by an entity having eminent domain authority (i.e. federal government agencies).³⁵¹ Condemnation is the formal process of exercising eminent domain authority.³⁵² Where the

344. U.S. CONST. amend. V.

345. See *Ferrari v. United States*, 73 Fed. Cl. 219, 225 (2006) (“A compensable taking of property occurs when society imposes a burden on an individual's property which, in fairness and justice, society itself should bear.”).

346. See *id.* at 226 (noting that the plaintiff's financial burden must be substantial that failing to present evidence of this economic harm is fatal to the takings claim).

347. See *id.* at 224 (“The Tucker Act grants this Court jurisdiction to entertain suits for money against the United States which do not sound in tort and which are founded upon the Constitution.”).

348. See *id.* at 225 (defining a taking).

349. See *id.* (“A taking may occur by physical occupation or invasion and by Government regulation of private property.”).

350. See *id.* (“[Indicating that a government regulation of private property is a compensable taking] when society imposes a burden on an individual's property which . . . society itself should bear.”).

351. See *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 430 (1982) (recognizing that permanent occupations of land [by the government] are takings).

352. See *Eminent Domain*, MUN. RESEARCH & SERVICES CTR. OF WASH. (June 2011), <http://www.mrsc.org/subjects/legal/eminentdomain.aspx> (“Proceedings to take property

federal government, or an agency thereof, makes non-temporary actual use and possession of private property, however slight, an actual taking has occurred and the property owner may seek just compensation through an action for inverse condemnation.³⁵³

2. Regulatory Taking

The seminal regulatory takings case is *Pa. Coal Co. v. Mahon*, in which the Supreme Court observed that: “while property may be regulated to a certain extent, if that regulation goes too far, it will be recognized as a taking.”³⁵⁴ The Court attempted to answer the question of how far is too far in *Lucas v. S.C. Coastal Council*.³⁵⁵ In *Lucas*, the Supreme Court reviewed a South Carolina statute, which prohibited building homes on erodible beachfront areas.³⁵⁶ Justice Scalia, writing for the majority, argued that the South Carolina statute rendered such property owners’ interests valueless, adopting a *per se* rule that a statute that deprives a landowner of all economically viable use of land requires just compensation.³⁵⁷ However, the Supreme Court carved out an exception to its *per se* rule when the property interests proscribed by the regulation were not initially part of the landowner’s title.³⁵⁸ In *Lucas*, the Court acknowledged that a landowner who does not suffer total economic deprivation as a result of a regulation may still have a takings claim depending upon the economic impact of the regulation and the degree to which the regulation interferes with investment-backed expectations.³⁵⁹ Broadly, *Lucas* stands for the

under eminent domain are referred to as ‘condemnation’ proceedings.”) (on file with the Washington and Lee Journal of Energy, Climate, and the Environment).

353. See *The World of Inverse Condemnation*, U.S. DEPT. OF JUSTICE, <http://www.justice.gov/enrd/3137.htm> (last visited Feb. 10, 2013) (“[Inverse condemnation claims allow private property owners to sue the United States when an] action has interfered with the use and enjoyment of their property.”) (on file with the Washington and Lee Journal of Energy, Climate, and the Environment).

354. *Penn. Coal Co. v. Mahon*, 260 U.S. 393, 415 (1922).

355. See *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1007 (1992) (addressing whether legislation prohibiting the building of habitable structures on private property constituted a taking when the state trial court determined that the prohibition rendered the property valueless).

356. See *id.* (describing the legislation’s prohibition on building habitable structures on beachfront property).

357. See *id.* at 1018–24 (describing the uses of eminent domain and determining that when a landowner “has been called upon to sacrifice all economically beneficial uses [of his land] in the name of the common good . . . he has suffered a taking” and compensation is appropriate).

358. See *id.* at 1027 (distinguishing between the *per se* rule and the circumstances that merit compensation, such as when land is deprived of all economically beneficial uses).

359. See *id.* at 1019 n.8 (criticizing the view that all economically beneficial uses must be deprived, Justice Stevens asserted that the fact that someone who has lost 95 percent

proposition that regulation may not be grossly inconsistent with a property owner's reasonable investment-backed expectations without just compensation being paid for the property interest.³⁶⁰ Where a regulatory taking of mining claim rights is found to have occurred, the government would be required to pay just compensation to the claimholder for the value of the mining rights lost.³⁶¹ The following subsection discusses just compensation in the context of valuing mining claims in greater detail.

3. Just Compensation

Following either the exercise of eminent domain or the finding of an actual or regulatory taking, the government must pay just compensation³⁶² for the property rights taken.³⁶³ In determining just compensation for the taking of land that has access to minerals not yet extracted, the value of minerals is not reflected in the land's fair market value unless the landowner can show that mineral extraction "is the highest and best use of the land and would have been reasonably probable in the reasonably near future."³⁶⁴ Furthermore, just compensation for minerals not yet extracted must factor in extraction, waste disposal, regulatory compliance, and marketing costs.³⁶⁵ The following section will apply the general law of takings to mining claim taking cases, specifically.

would not recover is "wholly arbitrary" as it interferes with "distinct investment-backed expectations").

360. See *id.* at 1034 (Kennedy, J., concurring) ("Where a taking is alleged from regulations which deprive the property of all value, the test must be whether the deprivation is contrary to reasonable, investment-backed expectations.").

361. See *Regulatory Takings: Implementation of Executive Order on Government Actions Affecting Private Property Use*, U.S. GOVT. ACCOUNTABILITY OFFICE 1, 21 (Sept. 2003), available at <http://www.gao.gov/new.items/d031015.pdf> (listing examples in which the government paid compensation for regulatory takings of rights in mining claims).

362. Just compensation is generally defined as fair market value for the property rights taken. See Office of the Property Rights Ombudsman, *Just Compensation*, UTAH DEP'T OF COMMERCE, <http://propertyrights.utah.gov/just-compensation/> (last visited Feb. 10, 2013) ("Just Compensation is usually defined as the market value of the property on the date of the taking, plus any associated damages.") (on file with the Washington and Lee Journal of Energy, Climate, and the Environment).

363. See *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 421 (1982) (determining that a minor but permanent physical occupation constitutes a taking and requires just compensation); see also *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1030 (1992) (acknowledging that just compensation is due when the government regulation of property constitutes a taking that deprives land of all economically beneficial uses).

364. See *United States v. Consol. Mayflower Mines, Inc.*, 60 F.3d 1470, 1475–76 (10th Cir. 1995) (considering the highest and best use in determining property's fair market value).

365. See Rebekah King, *Valuation of Minerals in Takings Cases*, 42 NAT. RESOURCES J. 185, 188 (2002) (recognizing that the cost of extraction could outweigh expected profits from the minerals).

B. Mining Claim Taking Issues

The remainder of this Section VII.B will discuss specific issues relating to takings of federal mining claims. Takings issues relating to patented mining claims are discussed first, followed by specific takings issues relating to unpatented mining claims, and finally this article will address the issue of determining just compensation.

1. Patented Mining Claims

Patenting a mining claim conveys title to both the surface land and subsurface minerals—a fee interest.³⁶⁶ As such, patented mining claims are not subject to withdrawal from public land access because the land is no longer public and federally owned.³⁶⁷ Furthermore, patented claims are not subject to the same federal regulations as unpatented claims.³⁶⁸ Patented claims are merely subject to nuisance law, zoning requirements, and federal and state environmental regulations such as the Clean Water and Clean Air Acts promulgated by the EPA.³⁶⁹ The non-temporary physical invasion or occupation of patented mining claim land—fee interest property—is obviously a compensable actual government taking.³⁷⁰ Furthermore, regulating a patented claimholder's (i.e. a private property owner's) right or economic ability to mine or otherwise realize the benefits of his or her reasonable investment-backed expectations (i.e. payment of location notice fees, assessment fees, the per-acre purchase price, and other related expenses), could also constitute a compensable taking—especially where the regulations render the land of no economic value.³⁷¹

366. See *Federal Lands*, *supra* note 52 (“[P]atenting a claim gives the holder legal title to both the surface and the minerals.”).

367. See *Federal Lands*, *supra* note 52 (indicating that federal land managers lack authority under the Mining Law to reclaim mining sites and withdraw them from development).

368. See *Federal Lands*, *supra* note 52 (recognizing that patented claims do not have to follow the same regulations as unpatented claims).

369. See Bureau of Land Mgmt., *Mining Laws*, DEP'T OF THE INTERIOR http://www.blm.gov/wo/st/en/info/regulations/mining_claims.html (last visited Feb. 10, 2013) [hereinafter *Mining Laws*] (describing the requirements associated with patented mining claims) (on file with the Washington and Lee Journal of Energy, Climate, and the Environment).

370. See *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 431 (1982) (analogizing the current matter to the *United States v. Pewee Coal Co.*, where the Court “held that the Government’s seizure and direction of operation of a coal mine . . . constituted . . . an actual taking of possession and control”).

371. See *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1071 (1992) (Stevens, J., dissenting) (recognizing that a takings inquiry requires the court to consider the government action’s “interference with reasonable investment-backed expectations”).

2. Valid Unpatented Mining Claims

Courts have traditionally held that valid unpatented mining claims are fully recognized real property interests within the protection of the Fifth Amendment's prohibition against the taking of *private* property for public use without just compensation, since unpatented mining claimholders hold the exclusive right to mineral extraction³⁷² and such exclusive right is subject to sale and other forms of disposal common to real property interests.³⁷³ Thus, while valid unpatented claimholders do not own fee title to *private* property, the exclusive right to mineral extraction is generally considered a sufficient *private* property interest to be subjected to a Fifth Amendment takings claims.³⁷⁴ Since the only property right of an unpatented claimholder subject to a takings analysis is the right to extract the underground mineral deposit, the government could only commit an *actual* taking of a valid unpatented mining claim where the government mines the claim itself or grants some other party the right to mine such claim.³⁷⁵ The remainder of this subsection will focus on a regulatory takings analysis since: (1) the government does not appear intent to conduct actual mining activities of its own; (2) the government has not proposed to sell such federal lands; and (3) the government has not been shown to prefer certain unpatented mining claimholders to others.

A regulation which is so "substantial and burdensome" so as to deprive an unpatented claimholder of all or most of the economically viable use is very likely a regulatory taking.³⁷⁶ Furthermore, a regulation that

372. An unpatented mining claim grants a prospector-claimholder the exclusive right to mine the land and sell the minerals without charge, so long as the prospector-claimholder complies with federal and state mining laws and regulations. See GEORGE CAMERON COGGINS & ROBERT L. GLICKSMAN, PUBLIC NATURAL RESOURCES LAW § 42:20 (2d ed. 2013) (summarizing judicial rulings affecting mining claims).

373. See *Skaw v. United States*, 740 F.2d 932, 935 (Fed. Cir. 1984) ("[Mineral rights are a] property right in the full sense . . . capably of transfer by conveyance, inheritance, or devise."); *Lockhart v. Johnson*, 181 U.S. 516, 520 (1901) (acknowledging the property rights associated with claims and the difference between claims on public and private land).

374. See Michael Graf, *Application of Takings Law to the Regulation of Unpatented Mining Claims*, 24 *ECOLOGY L.Q.* 57, 113–15 (1997) ("[Unpatented claimholders sometimes have a private interest subject to takings claims because] judicial precedent has conditioned the status of the unpatented claim as a property interest on the claimant's ability to both comply with reasonable environmental regulation and turn a profit.").

375. Neither increased governmental regulation of mining activities nor regulations that withdraw land from public mining access constitute an actual taking of an unpatented mining claimholders subsurface rights. See *Idaho Mining & Dev. Co. et al.*, 132 Interior Dec. 29, 34–35 (IBLA 1995) (finding that the statutory requirements to pay certain fees for mining claims are not a taking).

376. This result seems particularly likely if a balancing of public and private interests reveals a private interest "much more deserving of compensation for any loss actually incurred." See *Fla. Rock Indus., Inc. v. United States*, 791 F.2d 893, 904 (Fed. Cir. 1986); see also *Whitney Benefits, Inc. v. United States*, 926 F.2d 1169, 1176 (Fed. Cir. 1991).

withholds an unpatented claimholder's access to mine public resources³⁷⁷ or public lands³⁷⁸ may constitute a taking. However, where the limitations proscribed by the regulation were inherently restricted, a taking would never lie.³⁷⁹ Because there exist few black letter regulatory taking rules, ad hoc factual inquiries are necessary, with particular attention paid to: (1) the economic impact of the limitation; (2) the level and reasonableness of investment-backed expectations; and (3) the character of the government action (i.e. whether the government action is for a proper purpose and imposes financial burden in a just manner).³⁸⁰

Limitations on mining activities that were not really a part of the claimholder's title to begin with (i.e. inherently restricted) would not be subject to challenge as a taking.³⁸¹ For instance, the valuable discovery, use limitation, and mine-to-mill site provisions have been in existence in some form since the enactment of the General Mining Act.³⁸² However, only recently has the federal government used these long-standing provisions, in a combined manner, to invalidate an unpatented claimholder's exclusive right to extract minerals.³⁸³ Although the BLM may not have previously challenged the profitability, and thus validity, of an unpatented mining claim under the combined provisions, an unpatented mining claim that was *never* considered profitable under such combined provisions is inherently invalid.³⁸⁴ This is because the right to extract such minerals was never part of the claimholder's title.³⁸⁵ Therefore, the federal government's delayed use of the combined valuable discovery, use, and mine-to-mill site provisions would not be subject to takings analysis where these long-standing provisions could have been used in combination to invalidate an

377. Foster v. United States, 607 F.2d 943, 950 (Ct. Cl. 1979).

378. Utah v. Andrus, 486 F. Supp. 995, 1011 (D. Utah 1979).

379. See Lucas v. S.C. Coastal Council, 505 U.S. 1003, 1027 (1992) (“[Regulations are allowable as long as] some values are enjoyed under an implied limitation.”).

380. See Connolly v. Pension Benefit Guar. Benefit Corp., 106 S. Ct. 1018, 1025 (1986); Kaiser Aetna v. United States, 444 U.S. 164 (1979); Aris Gloves, Inc. v. United States, 420 F.2d 1386, 1391 (Ct. Cl. 1970).

381. See Ferrari v. United States, 73 Fed. Cl. 219, 225 (2006) (reasoning that plaintiffs bringing a takings challenge must demonstrate how they were deprived of their “property or its economic use,” rather than incidental limitations not specifically related to their title claim).

382. See *Mining Laws*, *supra* note 369 (summarizing the limitations and regulations under the General Mining Law).

383. See Forest Service, *Anatomy of a Mine from Prospect to Production*, U.S.D.A. 1, 13 (Feb. 1995), available at http://www.fs.fed.us/geology/anatomy_mine.pdf (acknowledging that in certain circumstances the government may invalidate a claim).

384. See *Mining Laws*, *supra* note 369 (requiring that a mineral locator demonstrate that his claim is profitable in order to justify his possession).

385. See *Mining Laws*, *supra* note 369 (requiring that certain laws and regulations be followed in order for minerals to be extracted regardless of title to surface rights).

unpatented mining claim from its inception.³⁸⁶

The test for claim profitability under the combined provisions may also subsequently invalidate a *previously valid* unpatented mining claim, since the test must factor increasing costs of complying with regulations that may not have been in existence at the time of the claim's location.³⁸⁷ Subsequent federal regulations that invalidate an otherwise valid unpatented mining claim due to unprofitability would extinguish the unpatented mining claimholder's only property right—the right to a flow of income from the production of the claim³⁸⁸—and thus would constitute a denial of all economically viable use under *Lucas*.³⁸⁹ However, the government could argue that an unpatented claimholder was not reasonable in expending funds on a marginally-valuable claim site that could be invalidated by fairly predictable, expected, and widespread increases in environmental and other regulatory costs.³⁹⁰ Where a claimholder is found to not have been reasonable in expending funds, the claimholder would have no investment-backed expectations.³⁹¹ Thus, in such a situation, a regulatory takings claim would be unlikely to lie.³⁹² The federal government's argument that a claimholder is unreasonable in expending funds on an unpatented mining claim is likely persuasive and able to bar application of a regulatory takings analysis to a scenario in which increases in regulatory costs were generally

386. Unfortunately, the determination of whether there was ever a requisite discovery to begin with is a question of fact; the decision of which by the Secretary of the Interior was conclusive in the absence of fraud or imposition. *See Cameron v. United States*, 252 U.S. 450, 455 (1920) (determining that the federal government can hold full legal title to a claim that is invalidated).

387. *See Mining Laws, supra* note 369 (requiring that a mineral locator demonstrate that his claim is profitable after the expenses are taken into account).

388. *United States v. Locke*, 471 U.S. 84, 105 (1985).

389. *See Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1018–24 (1992) (determining that it is possible for the government to regulate validly held land to the point where it deprives the “landowner of all economically beneficial uses”).

390. All claimholders should expect that a mining claim must conform to the General Mining Act and subsequent legislation, as well as interpretive judicial decisions, before a defeasible unpatented mining claim can benefit from Fifth Amendment protection. This is because the General Mining Act and its progeny have a long history of generally increasing the regulatory burden on claimholders. Judicial decisions have had no problem upholding these regulations. Therefore, claimholders should not reasonably expect that general increases in regulatory burdens would not render their claims unprofitable, and thus, invalid under the Marketability Test. *See Cameron*, 252 U.S. at 460 (indicating that unpatented claims are vulnerable); *Swanson v. Babbitt*, 3 F.3d 1348, 1353 (9th Cir. 1993) (determining that patented rights are protected property rights); *Rinke, supra* note 2 at 829 (“Mining claims might be invalid for failure to satisfy the valuable deposit requirement of the law.”).

391. *See Lucas*, 505 U.S. at 1034 (Stevens, J., dissenting) (stating that ‘reasonable’ investment-backed expectations are needed to find no value under the Takings Clause).

392. *See id.* at 1018–24 (requiring the demonstration of the loss of all economic value in order to constitute a taking, yet basing such economic loss on the reasonable investment-backed expectations rather than unreasonable expectations).

expected to occur on a widespread basis.³⁹³ The reasonableness of expending funds in furtherance of an unpatented mining claim would vary depending upon the time in which the funds were expended.³⁹⁴ Obviously, the government's argument would be strongest where the value of the claim was marginal to begin with, and either increased environmental regulations and/or the patent moratorium had already begun.³⁹⁵

The statutory authority to generally regulate mining activity is quite different from the regulatory power to withdraw lands from mineral entry or otherwise prohibit mining activities.³⁹⁶ The exercise of mere regulatory power may preclude mining activity by invalidating a miner's "discovery," while at the same time preserving the possibility of relocation for future mining activities that meet the heightened discovery threshold.³⁹⁷ By contrast, withdrawal under the Antiquities Act prevents relocation of a mining claim, and criminalizes the appropriation or excavation of the "prehistoric ruins" and "objects of antiquity" existing on such withdrawn lands.³⁹⁸ The permanent withdrawal and criminalization of mining activities under the Antiquities Act eliminates all free mining access of an unpatented claimholder.³⁹⁹ A regulation that withholds an unpatented claimholder's access to mine public resources⁴⁰⁰ or public lands⁴⁰¹ has been found to constitute a compensable taking. Furthermore, the right to a flow of income from the conduct of mining activities is the only real property right of an unpatented claimholder.⁴⁰² Therefore, the government's withdrawal of federal land under the Antiquities Act very likely denies an unpatented claimholder of all future economically viable use. A denial of all economic

393. *See id.* (implying that reasonable investment-backed expectations consider regulatory costs).

394. *See Mining Laws, supra* note 369 (listing some of the expenses associated with a mining claim that should be reasonable to expect and would be more burdensome for less productive claims).

395. *See Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1017 (1992) (reasoning that a regulatory taking has occurred when total deprivation of beneficial use has occurred, but if the beneficial use was marginal, then the landowner may have a more difficult time demonstrating a taking).

396. *See Graf, supra* note 376, at 120 (comparing and contrasting mining regulations with withdrawal powers).

397. *See Graf, supra* note 376, at 120 (comparing the authority to regulate mining to the authority to withdraw land from mining use).

398. *See* 16 U.S.C. § 433 (2012) ("Any person who appropriates, excavates, injures, or destroys any historic or prehistoric ruin or monument, or any object of antiquity situated on land owned or controlled by the United States Government . . . shall, upon conviction, be [subject to a] fine . . . imprisonment, or both.").

399. *See Graf, supra* note 376, at 120 (discussing the result of a withdrawal or prohibition of mining).

400. *Foster v. United States*, 607 F.2d 943, 950 (Ct. Cl. 1979).

401. *Utah v. Andrus*, 486 F. Supp. 995, 1011 (D. Utah 1979).

402. *United States v. Locke*, 471 U.S. 84, 105 (1985).

use was found to constitute a compensable Fifth Amendment taking in *Lucas*.⁴⁰³ Since a withdrawal of federal land under the Antiquities Act is very likely considered a denial of all of an unpatented claimholder's economically viable use (or at least a prohibition on access), such a withdrawal would likely constitute a compensable Fifth Amendment Taking, unless: (1) the limitations proscribed by the regulation were inherently restricted;⁴⁰⁴ (2) the limitations were enacted for a proper government purpose; (3) the claimholder's investment-backed expectations were unreasonable or insignificant;⁴⁰⁵ or (4) fairness and justice dictates that society should not bear the burden.⁴⁰⁶

A withdrawal of federal land is unlikely to be considered "inherently restricted." Although the authority to withdraw federal land under the Antiquities Act may pre-exist the claim, it is the specific withdrawal of land that must be considered "inherently restricted" (i.e. pre-existing).⁴⁰⁷ Any contrary interpretation, taken to the extreme, would render all limitations "inherently restricted" to the extent that such limitations (or the authority to limit in such a manner) were authorized or delegated by another law. All U.S. government action is authorized or delegated by the Constitution or some other enabling legislation. Therefore, such an interpretation would give the government near carte blanche to avoid the Fifth Amendment.

Also, it would be difficult to substantiate that a long-standing holder of an extremely valuable unpatented claim was unreasonable in expending funds to maintain such claim, because of the unpredictability of a federal land withdrawal affecting a claimholders specific claim.⁴⁰⁸ Furthermore, due to the local effect of the exercise of withdrawal powers,

403. See *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1018–24 (1992) (stating that if a property owner is required to sacrifice all economically beneficial uses of their property, then this is a taking); Graf, *supra* note 376, at 120–21 ("As a consequence, withdrawal and prohibition, unlike regulation, are treated as 'taking' valid existing mining claims under the Fifth Amendment.").

404. See *Lucas*, 505 U.S. at 1027 ("[Regulations are allowable as long as] some values are enjoyed under an implied limitation.").

405. See *id.* at 1034 (Kennedy, J., concurring) ("[The test for whether regulations that deprive property of all value constitute a taking is] whether the deprivation is contrary to reasonable, investment-backed expectations.").

406. See *Ferrari v. United States*, 73 Fed. Cl. 219, 225 (2006) (implying that a regulatory taking has not occurred if fairness and justice do not demand that society bear the burden). Ad hoc factual inquiries are necessary and should particularly pay attention to the economic impact of the subsequent law, its interference with reasonable investment-backed expectations, and the character of the government action. See *Connolly v. Pension Benefit Guar. Benefit Corp.*, 106 S. Ct. 1018, 1025 (1986); *Kaiser Aetna v. United States*, 444 U.S. 164 (1979); *Aris Gloves, Inc. v. United States*, 420 F.2d 1386, 1391 (Ct. Cl. 1970).

407. *Lucas*, 505 U.S. at 1027.

408. See, e.g., *Skaw*, 740 F.2d at 938–40 (providing The Wild and Scenic Rivers Act of 1968 as an example of the unpredictability of federal land withdrawal).

as compared to the widespread effect of general federal regulations, an unpatented claimholder is disproportionately affected in comparison to the rest of the claim holding population.⁴⁰⁹ Since withdrawals are unpredictable and disproportionately affect a few claims, the interests of justice and fairness seem to dictate that the burden should be carried by society, rather than an individual claimholder who held significant investment-backed expectations.⁴¹⁰

Generally speaking, the U.S. government would usually want to preclude mining activities through general regulation, rather than land withdrawal, so as to avoid the paying of just compensation for a regulatory taking.⁴¹¹ However, the U.S. may want to withdraw land on which invalid mining claims rest, in order to prevent relocation where the government wishes to retain all mineral rights.⁴¹² Of course, assuming a claimholder has a substantive good faith takings claim, the claimant must still satisfy other more generalized requirements to successfully bring the claim.⁴¹³ The remainder of this article discusses certain procedural and litigation issues involved in bringing a Fifth Amendment taking claim in the mining context, with particular focus on the issue of an unpatented claimholder's standing to litigate.

VIII. Procedures for Litigating Mining Claims Taking Issues

As noted above, where the U.S. government has withdrawn land that is subject to a valid unpatented mining claim from federal mining access, the unpatented mining claimholder may seek just compensation by bringing an action for inverse condemnation.⁴¹⁴ A patented claimholder may also bring an action for inverse condemnation where the federal government makes an actual invasion onto private, patented land or where federal mining or environmental regulations prevent all economically

409. See Graf, *supra* note 376, at 111 (discussing the benefits of broad regulation for society and environmental policy as compared to the negative impacts on individual miners and mining companies).

410. See Graf, *supra* note 376, at 111 (asking whether it may be equally valuable to set impracticably high technology standards for mining operations instead of using full withdrawal).

411. See Graf, *supra* note 376, at 120–21 (noting that the presumption that a withdrawal is a Fifth Amendment taking creates a preference for broad regulatory action instead of the use of withdrawals).

412. See Graf, *supra* note 376, at 120–21 (discussing Congressional power under the Property Clause to withdraw lands from mineral entry or prohibit mining claims).

413. See *Skaw*, 740 F.2d at 939–40 (providing the questions the Claims Court must address on remand).

414. See *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 435–38 (1982) (finding that the New York Law requiring a landlord to permit CATV installation on buildings was an unconstitutional taking).

valuable uses of the patented land in violation of the patented claimholder's valid investment-backed expectations.⁴¹⁵ In either a patented or unpatented situation, any plaintiff making a proper claim for inverse condemnation must follow certain procedural rules and show that they have attempted every other avenue possible⁴¹⁶ to obtain their rights in the land.⁴¹⁷ These procedures differ between cases that are new and cases where the claimant is intervening that already exist—both of which are discussed below.

A. Filing Non-Existing Case

The procedure for filing a new case for inverse condemnation (a “non-existing case”) of a mining claim varies based upon the type of claim.⁴¹⁸ If the land involved is private, i.e. a patented mining claim, the mining claimholder must file a claim in the United States Court of Federal Claims, under the Tucker Act.⁴¹⁹ In order to receive injunctive relief (i.e. an order requiring specific performance conveying title to the land in fee simple absolute or an injunction against federal encroachments), a patented mining claimholder would be required to prove that they suffered a *substantial* injury that is not accurately measurable or adequately compensable by money damages.⁴²⁰ A patented claimholder could argue, for instance, that constantly evolving technological advances in mining and

415. See Sharon L. Browne, *Administrative Mandamus as a Prerequisite to Inverse Condemnation: “Healing” California’s Confused Takings Law*, 22 PEPP. L. REV. 99, 104 (1994) (“Inverse condemnation is an action brought by an owner ‘to recover damages for injury to his property from (the government).’” (quoting 8 B.E. WITKIN, SUMMARY OF CALIFORNIA LAW § 1057 (1988))); see also James D. Smith, *Ripeness for the Taking Clause: Finality and Exhaustion in Williamson Cnty. Reg’l Planning Comm’n v. Hamilton Bank of Johnson City*, 13 ECOLOGY L.Q. 625, 625 n.1 (1986) (“Inverse condemnation is . . . the effect of a government regulation that deprives a person of substantially all of the use of his or her property.”).

416. Once those avenues are exhausted, a plaintiff can take their claim to the court.

417. See Smith, *supra* note 415, at 633 (discussing the Supreme Court’s ruling against Hamilton Bank, which was based on the party’s failure to exhaust its administrative remedies).

418. See *Hafen v. United States*, 47 F.3d 1183, *1 (Cal. Fed. 1995) (“28 U.S.C. § 2501 provides that every claim within the jurisdiction of the Court of Federal Claims shall be barred unless the claim is filed within six years after the claim first accrues.”).

419. See The Tucker Act, 28 U.S.C. § 1491 (2012) (providing the United States Court of Federal Claims with exclusive jurisdiction for claims against the United States based on the Constitution).

420. See generally *Ross-Simons of Warwick, Inc. v. Baccarat, Inc.*, 102 F.3d 12, 18 (1st Cir. 1996); *WPIX, Inc. v. ivi, Inc.*, 691 F.3d 275, 285 (2nd Cir. 2012) (“[H]arm may be irreparable where the loss is difficult to replace or measure, or where plaintiffs should not be expected to suffer the loss”).

rapidly changing mineral prices make their loss difficult to measure, and thus irreparable and deserving of injunctive relief.⁴²¹

To bring an action for inverse condemnation upon an unpatented mining claim interest, the party would need to first file for a patent with the Secretary of Interior prior to bringing an action.⁴²² The process for obtaining a patent as discussed above is generally subject to the provisions of 30 U.S.C.A. § 29.⁴²³ If a patent is denied (as would likely occur given the current federal patent moratorium), the unpatented mining claimholder may file a claim in the Court of Federal Claims to review the Secretary of Interior's initial decision to deny the patent.⁴²⁴ The party must show that the land is mineral in character using both the Prudent Man Test⁴²⁵ and the Marketability Test⁴²⁶ (discussed above). The civil litigation discovery process has several tools available to aid in garnering the information needed to establish claim value. Most notably, a claimholder could serve a *subpoena duces tecum* upon the government's geological expert,⁴²⁷ requiring that expert to bring any documents requested to a deposition, including an expert report on mineral valuation.⁴²⁸ There is a chance that the expert report would be privileged as work product, if it is prepared in anticipation of litigation and contains more than mere facts.⁴²⁹ However, the expert would still be able to be deposed regarding the factual information

421. Essentially, the patented claimholder would be arguing that owning the specific patented mining claim is a unique investment that offers a wide spectrum of potential returns, based upon an array of factors that are difficult to predict. Due to the uncertainty, the present value of the investment is subject to significant debate, giving the patented claimholder an argument that failure to grant injunctive relief could subject the patented claimholder to the risk of significant risk of financial loss that is difficult to measure.

422. See *Hafen*, 47 F.3d at *1 (“The Court of Federal Claims has no power to overrule or to ignore the decision of the Department of Interior . . . [in] a suit to recover just compensation for the taking of unpatented mining claims.” (quoting *Freese v. United States*, 221 Ct. Cl. 963, 964 (1979))).

423. See 30 U.S.C. § 29 (2012) (governing the patenting procedure for mineral lands).

424. See *Hafen*, 47 F.3d at *1 (arguing that Mr. Hafen's failure to appeal the Department of the Interior's decision that he did not have a valid claim precluded review by the Federal Claims Court).

425. See *Castle v. Womble*, 19 Pub. Lands Dec. 455, 457 (1894) (stating that the Prudent Man Test is the proper way to show that the land is mineral in character).

426. See *United States v. Garcia*, 161 Interior Dec. 235, 243 (IBLA 2004) (“[Requires a showing that] the evidence is of such a character that there is a reasonable prospect that the commercial value of the deposit will exceed the cost of extracting, processing, transporting, and developing a paying mine.”).

427. Preferably, the geological expert would be the field inspection expert at the local Bureau of Land Management State Office.

428. See FED. R. CIV. P. 45 (providing the procedural requirements to issue a subpoena duces tecum).

429. See *Hickman v. Taylor*, 329 U.S. 495, 509–11 (1947) (“Not even the most liberal of discovery rules can justify unwarranted inquiries into the files and the mental impressions of an attorney.”).

underlying any valuation opinion rendered.⁴³⁰ In addition, a claimant could file interrogatories and requests for admission from the government concerning claim value.⁴³¹ If the court upholds the Secretary of Interior's decision, the plaintiff may file an appeal.⁴³² However, if the unpatented claimholder never substantiates that he has a valid unpatented claim, there is no opportunity to establish that a compensable taking has occurred.⁴³³

B. Intervention in Existing Cases

On numerous occasions, plaintiffs have found themselves bringing a claim against a party that is already involved in a suit dealing with the same claim.⁴³⁴ In this instance, plaintiffs will have to follow specific federal rules of civil procedure in order to intervene as a party to the existing claim.⁴³⁵ Federal Civil Procedure Rule 24(a) provides that anyone shall be permitted to intervene in an action, upon timely application, when the applicant claims an interest relating to the property or transaction that is the subject of the action.⁴³⁶ Federal Civil Procedure Rule 24(a) further requires that the applicant be so situated that the disposition of the action may practically impair or impede the applicant's ability to protect that interest, unless existing parties adequately represent the applicant's interest.⁴³⁷ Accordingly, an applicant may intervene as of right if: (1) the application is "timely"; (2) the applicant has an interest in the property or transaction at

430. *See id.* ("Where relevant and non-privileged facts remain hidden in an attorney's files and where production of those facts is essential to the preparation of one's case, discovery may properly be had.")

431. *See* FED. R. CIV. P. 33, 36 (providing the requirements for interrogatories and requests for admission under the Federal Rules of Civil Procedure).

432. *See* Hafen v. United States, 47 F.3d 1183, *1 (Cal. Fed. 1995) (discussing the procedures that were available to Mr. Hafen at the time that the Department of the Interior denied the claim).

433. *See id.* (finding that Mr. Hafen does not have a right to contest the government's regulatory taking).

434. *See* Sierra Club v. Espy, 18 F.3d 1202 (5th Cir. 1994) (finding that the associations were entitled to intervene as a matter of right). *See generally* Utah Ass'n of Cntys. v. Clinton, 255 F.3d 1246 (10th Cir. 2001) (finding that the district court improperly dismissed the motion to intervene).

435. *See* FED. R. CIV. P. 24(a) (providing the procedural requirements for third party intervention).

436. *See id.* ("On timely motion, the court must permit anyone to intervene who: . . . claims an interest relating to the property or transaction."); *see also* Utah Ass'n of Cntys., 255 F.3d at 1249 (discussing the requirements of third party intervention under the Federal Rules of Civil Procedure).

437. *See* FED. R. CIV. P. 24(a) ("[A]nd is so situated that disposing of the action may as a practical matter impair or impede the movant's ability to protect its interest, unless existing parties adequately represent that interest."); *see also* Utah Ass'n of Cntys., 255 F.3d at 1249 (vacating the order denying the motion to intervene under Rule 24(a) and remanding with instructions for granting the application to intervene as of right).

issue; (3) the disposition of the action may impair the applicant's claim; and (4) the applicant is not adequately represented by the existing party.⁴³⁸ Each of these requirements will be individually discussed in the subsection below.

1. Timeliness

The first requirement for intervention as a matter of right is that the claim be timely filed. In *Utah Ass'n of Cntys. v. Clinton*, counties filed suit to invalidate a Presidential proclamation establishing a national monument.⁴³⁹ Environmental organizations and tourism-related businesses attempted to intervene in the litigation.⁴⁴⁰ The Tenth Circuit held that the motion was timely applied for; the environmental organizations and tourism-related businesses had sufficient interest in the national monument to warrant their intervention; the existing suit had the potential these organizations' abilities to protect their interests; and the interests of these organizations were not adequately protected by the existence of the federal government as a party to the existing action.⁴⁴¹ The *Utah Ass'n of Cntys. v. Clinton* court held that the timeliness of a motion to intervene is assessed in light of all the circumstances, including the length of time since the applicant knew of his interest in the case, the prejudice to the existing parties, the prejudice to the applicant, and the existence of any unusual circumstances.⁴⁴² "The requirement of timeliness is not a tool of retribution to punish the tardy would-be intervenor, but rather a guard against prejudicing the original parties by the failure to apply sooner. Federal courts should allow intervention where no one would be hurt and greater justice could be attained."⁴⁴³ In *Utah Ass'n of Cntys. v. Clinton*, there had been no scheduling order, no trial date set, and no cut-off dates for motions set.⁴⁴⁴

438. See FED. R. CIV. P. 24(a) (establishing when intervention is not allowed); see also *Utah Ass'n of Cntys.*, 255 F.3d at 1249 (quoting FED R. CIV. P. 24(a)).

439. See *Utah Ass'n of Cntys.*, 255 F.3d at 1249 (discussing the intervenors' allegation that the President violated the Antiquities Act).

440. See *Utah Ass'n of Cntys. v. Clinton*, 255 F.3d 1246, 1249 (10th Cir. 2001) (noting that the intervenors were seeking to protect the public lands and assure their perpetual integrity).

441. See generally *Utah Ass'n of Cntys.*, 255 F.3d 1246 (addressing the trial court's denial of intervention de novo and reversing).

442. See *id.* at 1250 (quoting *Sanguine, Ltd. v. U.S. Dep't of Interior*, 736 F.2d 1416, 1418 (10th Cir. 1984)).

443. *Sierra Club v. Espy*, 18 F.3d 1202, 1205 (5th Cir. 1994).

444. See *Utah Ass'n of Cntys. v. Clinton*, 255 F.3d 1246, 1250–51 (10th Cir. 2001) (addressing the plaintiff's contention that the case was ready for disposition).

Prior to the application for intervention, only discovery and motions relating to jurisdictional issues had occurred.⁴⁴⁵

2. *Sufficient Interest of Intervenor*

The second requirement for intervention as a matter of right is that the intervenor maintains a sufficient interest.⁴⁴⁶ Under Rule 24(a)(2) of the Federal Rules of Civil Procedure, an intervenor must claim “an interest relating to the property or transaction that is the subject of the action”⁴⁴⁷ An intervenor’s interest must generally be “direct, substantial, and legally protectable.”⁴⁴⁸ The inquiry of whether an intervenor has a sufficient interest is highly fact-specific, and the interest test is meant to dispose of lawsuits by involving as many apparently concerned persons as is compatible with efficiency and due process.⁴⁴⁹ In *Utah Ass’n of Cnty. v. Clinton*, the environmental organizations and the tourism-related businesses argued that they had

an interest in the continued existence of the monument and its reservation from public entry, both on the basis of their financial stake in the tourism the monument created and on the basis of their desire to further their environmental and conservationist goals by preserving the undeveloped nature of the lands encompassed by the monument.⁴⁵⁰

In *Coal. of Ariz. v. Dep’t of the Interior*, a commercial wildlife photographer, who had a particular interest in the Mexican Spotted Owl, sought to intervene in a suit brought against the U.S. Fish and Wildlife Service, challenging the Wildlife Service’s decision to protect the Mexican Spotted Owl under the Endangered Species Act.⁴⁵¹ The court held that the photographer’s involvement with the owl in the wild and his persistent

445. *See id.* (noting that the plaintiffs waited to intervene until after the governments dispositive motion to ensure that they would have a suit to intervene in and not waste judicial resources).

446. *See* FED. R. CIV. P. 24(a) (providing that anyone may intervene who claims an interest relating to the property or transaction that is the subject of the action); *Utah Ass’n of Cnty. v. Clinton*, 255 F.3d at 1249 (stating that Rule 24 requires an intervenor to claim an interest relating to the property or transaction).

447. FED. R. CIV. P. 24(a)(2).

448. *Coal. of Ariz. v. Dep’t of the Interior*, 100 F.3d 837, 839 (10th Cir. 1996).

449. *See id.* at 841 (“The ‘interest’ test is primarily a practical guide to disposing of lawsuits by involving as many apparently concerned persons as is compatible with efficiency and due process.”).

450. *Utah Ass’n of Cnty. v. Clinton*, 255 F.3d 1246, 1251 (10th Cir. 2001).

451. *See Coal. of Ariz. v. Dep’t of the Interior*, 100 F.3d at 841 (noting Dr. Silver has been at the forefront of efforts to protect the Owl under the Act).

record of advocacy for its protection amounted to a direct and substantial interest.⁴⁵² Under the rules set forth in *Utah Ass'n of Cnty. v. Clinton* and *Coal. of Ariz. v. Dep't of the Interior*, the holder of a valid and profitable unpatented claim should have no problem proving its sufficiency of interest in the land in question since its commercial and financial interest in the land is clear.⁴⁵³

3. Potential to Impair Interest of Intervenor

The third requirement for intervention as a matter of right is that the existing litigation has the potential to impair the intervenor's interest.⁴⁵⁴ Rule 24(a)(2) of the Federal Rules of Civil Procedure further requires that an intervenor demonstrate that the disposition of the action may, as a practical matter, impair or impede the intervenor's ability to protect their interest.⁴⁵⁵ To satisfy this element of the intervention test, a would-be intervenor must show only that impairment of its substantial legal interest is possible if intervention is denied—a minimal burden.⁴⁵⁶ In *Utah Ass'n of Counties v. Clinton*, the court held that the intervenors' interests in the preservation and protection of the monument would be significantly impaired by an adverse decision setting aside the creation of the monument, especially considering the fact that many of the intervenors owned tourism-related businesses that completely depend upon the existence of the monument for income.⁴⁵⁷ An unpatented claimholder's interest potentially could be impaired by litigation between a competing claimholder and the federal government, for instance.

452. See *id.* (providing that Dr. Silver's interest in the Owl, as a photographer, an amateur biologist, and a naturalist, is "direct, substantial, and legally protectable").

453. See *id.* (accepting Dr. Silver's interest in the owl as a photographer, an amateur biologist, and a naturalist, as sufficient under Rule 24); *Utah Ass'n of Cnty.*, 255 F.3d at 1253 (accepting the intervenors' financial stake in the tourism the monument created as well as their interest in preserving nature as a sufficient interest under Rule 24).

454. See FED. R. CIV. P. 24(a) ("[The interest must be] so situated that disposing of the action may as a practical matter impair or impede the movant's ability to protect its interest."); *Utah Ass'n of Cnty.*, 255 F.3d at 1253 (stating that an intervenor must demonstrate that the disposition of their action may "impair or impede their ability to protect their interest").

455. See *Utah Ass'n of Cnty.*, 255 F.3d at 1253 (acknowledging that Rule 24(a)(2) requires intervenors to demonstrate that the disposition of the action may impair or impede their ability to protect the interest).

456. See *Grutter v. Bollinger*, 188 F.3d 394, 399 (6th Cir. 1999) (noting that the burden to satisfy the impairment standard is minimal (citing *Mich. State AFL-CIO v. Miller*, 103 F.3d 1240, 1247 (6th Cir. 1997))).

457. See *Utah Ass'n of Cnty. v. Clinton*, 255 F.3d 1246, 1253 (10th Cir. 2001) (explaining that the intervenors had an economic stake in the monument's continued existence).

4. Adequacy of Representation of Intervenor by Existing Parties

The fourth requirement for intervention as a matter of right is that the intervenor's interest must not be adequately represented by an existing party.⁴⁵⁸ In order to intervene under Rule 24(a) of the Federal Rules of Civil Procedure, a would-be intervenor must show that existing parties to the suit does not adequately represent its interest.⁴⁵⁹ The would-be intervenor bears the burden of proving inadequate representation, but that burden is quite minimal,⁴⁶⁰ therefore, the possibility that the interests of the applicant and the parties may diverge need not be great in order to satisfy this burden.⁴⁶¹ An intervenor must only show the possibility of inadequate representation.⁴⁶² The possibility of inadequate representation has historically been shown to be quite strong where the representing party is the government because the government must represent the interests of the public at large, and those interests may or may not be coextensive with the intervenor's particular interest.⁴⁶³ It has been said that the government cannot adequately represent private interests since the government is charged with protecting the public interest.⁴⁶⁴

Even if a claimant properly meets all the above procedural requirements to bring the suit, it is likely that the litigant must also win a challenge by the U.S. as to the standing of the claimant, discussed immediately below.

458. See FED. R. CIV. P. 24(a)(2) (“[One may intervene] unless existing parties adequately represent [the] interest.”); *Utah Ass’n of Cnty.*, 255 F.3d at 1254 (stipulating that an intervenor is not entitled to intervene if his interest is adequately represented by existing parties).

459. See *Utah Ass’n of Cnty.*, 255 F.3d at 1254 (noting that there is no right to intervene unless the interest “is adequately represented by existing parties”).

460. See *Utah Ass’n of Cnty.*, 255 F.3d at 1254 (stating that the burden is the minimal one of showing that representation may be inadequate).

461. See *Natural Res. Def. Council, Inc. v. U.S. Nuclear Regulatory Comm’n*, 578 F.2d 1341, 1346 (10th Cir. 1978) (“The possibility of divergence of interest need not be great in order to satisfy the burden.”).

462. See *Utah Ass’n of Cnty.*, 255 F.3d at 1254 (noting that the burden is one of showing that “representation ‘may’ be inadequate”) (emphasis added).

463. See *Utah Ass’n of Cnty.*, 255 F.3d 1246, 1253 (10th Cir. 2001) (indicating that the burden is easily met when the party is the government, as it has an obligation to also represent the public, and that interest may be viewed as coextensive with the intervenor's particular interest).

464. See *Utah Ass’n of Cnty.*, 255 F.3d at 1255 (“[History of case law states] government representation may not adequately represent private interests because the government protects the public interest.”).

IX. The Government's Constitutional Standing Defense to an Unpatented Mining Claim Takings Action

The federal government often challenges a plaintiff's Fifth Amendment inverse condemnation takings claim by arguing that the plaintiff lacks standing to sue and/or the issue is not ripe for judicial decision.⁴⁶⁵ To meet the standing requirements of Article III of the Constitution, a plaintiff must allege personal injury fairly traceable to the defendant's allegedly unlawful conduct and likely to be redressed by the requested relief.⁴⁶⁶ Therefore, for a plaintiff to claim standing to sue or intervene, the plaintiff must show: (1) injury in fact; (2) causation; and (3) redressability.⁴⁶⁷ Each of these three requirements will be individually discussed in the subsections immediately below.

A. Requirements

1. Actual or Threatened Injury (Injury in Fact)

The federal government has often challenged the standing of plaintiffs for their failure to prove a direct injury.⁴⁶⁸ The party bringing the action must have suffered or will imminently suffer, injury due to the action at issue.⁴⁶⁹ An "injury" is defined as an invasion of a legally protected interest that is concrete and particularized—not abstract.⁴⁷⁰ Courts have consistently held that a plaintiff claiming only a generally available grievance about government, unconnected with a threatened concrete interest of his own, does not state an Article III case or controversy.⁴⁷¹

465. See *Allen v. Wright*, 468 U.S. 737, 750 (1984) (providing that standing and ripeness are among the most important doctrines that Article III presents in a government challenge).

466. See *id.* at 751 (explaining that the injury must be fairly traceable to the challenged action and that relief from the injury must be likely to follow from a favorable decision).

467. See *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560 (1992) (holding that a plaintiff must have suffered an injury in fact, the injury must have a causal connection to the conduct complained of, and it must be likely that the injury will be redressed by a favorable decision).

468. See *id.* at 574 (detailing a history of cases that have been dismissed for a lack of injury in fact).

469. See *id.* at 560 (stating that an injury must be actual or imminent, not conjectural or hypothetical).

470. See *Raines v. Byrd*, 521 U.S. 811, 819 (1997) ("[An injury requires the plaintiff to have suffered] an invasion of a legally protected interest which is . . . concrete and particularized." (citing *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560 (1992))).

471. See *Lujan*, 504 U.S. 555 at 573–74 ("[A] plaintiff raising only a generally . . . grievance about [the] government, claiming only harm to his and every citizen's interest in proper application of the Constitution and laws, and seeking relief that

In the context of unperfected mining claims, regulations that render claims economically non-viable after location is noticed, but before a valuable discovery is made, would leave no cognizable property interest for which to initiate suit.⁴⁷² However, where specific land already subject to valid unpatented mining claims is withdrawn from public mining access, the unpatented claimholder may be found to have standing because the claim is valid and compensable and the effects are local—a particularized injury.⁴⁷³ It remains unclear whether environmental regulations that effectively prevent the economic viability of mining operations would constitute a particularized injury.

2. Causation

There must be a causal connection between the injury and the conduct complained of, so that the injury is fairly traceable to the challenged action of the defendant and not the result of the independent action of some third party who is not before the court.⁴⁷⁴ In the context of an unpatented mining claim takings issue, the plaintiff must show that the government's action caused the loss of property rights and economic value in the unpatented claim.⁴⁷⁵ The government's causation may be difficult to prove where industry norms and technological limitations also play large parts in the mining operation's economic non-viability.⁴⁷⁶

3. Redressability

no more directly and tangibly benefits him than it does the public at-large does not state an Article III case or controversy.”)

472. See Graf, *supra* note 376, at 122 (noting that no property rights are formed where the government imposes regulations on a proposed operating plan before valuable discovery takes place).

473. See *Raines*, 521 U.S. at 819 (stating that an actionable injury is an invasion of a legally protected interest that is concrete and particularized).

474. See, e.g., *Mass. v. EPA*, 549 U.S. 497 (2007) (stating that the EPA must ground its action or inaction in its own reasoned explanations).

475. See Graf, *supra* note 376, at 129 (explaining that, under a traditional analysis of takings, government regulation that “renders an unpatented mining operation unprofitable could be ruled a taking” in that the government may not regulate property so as to deny an owner all economic use).

476. See Graf, *supra* note 376, at 108 (noting that in some situations, normal mining activities may themselves trigger stricter regulation, resulting in greater government authority to impose any restrictive standards deemed necessary to protect the resource, even if such standards were not achievable through the use of existing technology).

The party seeking judicial relief must show that there is a substantial probability that a favorable decision will redress the injury.⁴⁷⁷ The party seeking judicial relief need not show certain redressability, but redress may not be speculative.⁴⁷⁸ As such, finding that a compensable taking occurred would likely offer complete redress to such an unpatented claimholder.

X. Conclusion

The U.S. government has begun to enforce existing regulations, such as the valuable discovery requirement, the use limitation, and the mine-to-mill site ratio, in a combined manner that often has the effect of invalidating claims to all but the most highly dense and graded deposits.⁴⁷⁹ The U.S. has also sought the withdrawal of many Western lands from public mining access, as national monuments under the Antiquities Act.⁴⁸⁰ Presumably some of these lands contain high density, high-grade deposits of valuable minerals and are subject to unpatented mining claims. With the U.S. tightening the reins on federal land mining in the face of rising mineral values, many unpatented claimholders have looked to the U.S. Constitution for redress against the “taking” of valid unpatented mining claims.⁴⁸¹

Since the only property right of an unpatented claimholder subject to a takings analysis is the right to extract the underground mineral deposit, it is highly unlikely that the government would be found to have engaged in an actual taking.⁴⁸² The enforcement of regulations (existing at the time of a claim’s location) to invalidate a claim is not subject to a Fifth Amendment regulatory takings analysis, because the claimholder never held a compensable property interest to begin with.⁴⁸³ Subsequently enacted mining regulations, which serve to invalidate an unpatented mining claim

477. See *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560 (1992) (stating that it must be likely, not merely speculative, that the injury at issue will be redressed by a favorable decision).

478. See *id.*

479. See *Crown Jewel*, *supra* note 2, at 822 (noting that three provisions of the law have emerged to limit greatly the scope of mining: the discovery requirement, the mine-to-mill site ratio, and use restrictions imposed on each).

480. See An Act for the Preservation of American Antiquities, 16 U.S.C. §§ 431–33 (1906) (prohibiting the appropriation, destruction, injury and excavation of any historic or prehistoric ruin or monument, or any object of antiquity).

481. See *Mining Claim*, *supra* note 7 (detailing stricter, new requirements for patent applications).

482. See *Graf*, *supra* note 376, at 129 (“[T]he characterization of the unpatented mining claim as a conditional property interest did not constitute a ‘sudden and unpredictable’ change in the law, and thus did not upset miners’ reasonable expectations in violation of the Fifth Amendment.”).

483. See *Graf*, *supra* note 376, at 129 (explaining that, without a valid property interest, a claimant has no cause of action under the Fifth Amendment).

subject to relocation, are also likely not subject to a Fifth Amendment regulatory takings analysis, because increases in mere regulation are likely predictable and expected and do not prohibit all future economic use.⁴⁸⁴

However, a withdrawal under the Antiquities Act prevents relocation of a mining claim and criminalizes the conducting of mining activities on such withdrawn lands.⁴⁸⁵ Thus, using the Antiquities Act to permanently withdraw federal land eliminates all future economic use of the mining rights (the only property right afforded an unpatented claimholder), constituting a denial of all economic use under *Lucas*.⁴⁸⁶ Since withdrawals are unpredictable and disproportionately affect a small group of claimholders, the interests of justice and fairness dictate that the burden be carried by society, rather than the individual claimholder who likely had significant and reasonable investment-backed expectations related to the withdrawn property.⁴⁸⁷ Furthermore, a regulation that withholds an unpatented claimholder's access to mine public resources⁴⁸⁸ or public lands⁴⁸⁹ has been found to constitute a compensable taking. Given all of the above, it would behoove holders of valid unpatented claims to take a hard look at whether the use of the Antiquities Act in this manner gives them an appropriate Fifth Amendment taking cause of action.

484. See *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1018–24 (1992) (stipulating that a taking has occurred only when all economically beneficial uses of a property have been prohibited).

485. See 16 U.S.C. § 433 (“[The Antiquities Act penal provision provides] any person who appropriates, excavates, injures, or destroys any historic or prehistoric ruin or monument, or any object of antiquity situated on land owned or controlled by the United States Government, shall, upon conviction, be subject to a fine, or imprisonment, or both.”).

486. See *Graf*, *supra* note 376, at 120 (“[A] withdrawal or prohibition eliminates any future free access regardless of how valuable the mineral or how sophisticated the level of mining technology may become.”); *Lucas*, 505 U.S. at 1018–24 (stipulating that when all economically beneficial uses of a property have been prohibited, a taking has occurred).

487. See *Ferrari v. United States*, 73 Fed. Cl. 219, 225 (2006) (“[A taking of property occurs when society imposes a burden on an individual’s property which, in fairness and justice, society itself should bear.”).

488. *Foster v. United States*, 607 F.2d 943, 950 (Ct. Cl. 1979).

489. *Utah v. Andrus*, 486 F. Supp. 995, 1011 (D. Utah 1979).