

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* DAN D. BROWNING,  
ETHAN D. JOFFE, and JARON Z. LANIER

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Appeal 2007-0700  
Application 09/159,509<sup>1</sup>  
Patent 5,559,995  
Technology Center 2100

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Decided: June 20, 2007

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Before FRED E. MCKELVEY, *Senior Administrative Patent Judge*, and  
HOWARD B. BLANKENSHIP and ALLEN R. MACDONALD,  
*Administrative Patent Judges*.

MACDONALD, *Administrative Patent Judge*.

DECISION ON APPEAL

AFFIRMED-IN-PART

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<sup>1</sup> Application filed September 23, 1998, seeking to reissue U.S. Patent 5,559,995 issued September 24, 1996, based on Application 07/939,834, filed September 2, 1992, as a continuation of Application 07/621,474, filed November 30, 1990, now abandoned. The real party in interest is Sun Microsystems, Inc. (Br. 2).

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The decision of the Examiner rejecting claims 10-43, 46-55, 58-66, 97-104 and 106-108 is *affirmed*. The decision of the Examiner rejecting claims 44-45, 67-68 and 84-94 is *reversed*.

The following opinions follow: (1) a majority opinion authored by Judge MacDonald, joined by Senior Judge McKelvey, (2) a concurring opinion by Senior Judge McKelvey, and (3) an opinion concurring-in-part and dissenting-in-part authored by Judge Blankenship. Judge Blankenship would reverse the Examiner's rejection of all claims.

MacDONALD, Administrative Patent Judge.

## I. STATEMENT OF CASE

1. Appellants appeal under 35 U.S.C. § 134 from a final rejection of reissue claims 1-46, 48-94, and 97-108 entered April 10, 2001. We have jurisdiction under 35 U.S.C. § 6(b).

2. The Examiner has withdrawn the rejection of claims 1-9, 56-57, 69-83, and 105. (Supplemental Answer 3:1-2).

3. Claims 10-46, 48-55, 58-68, 84-94, 97-104, and 106-108 remain on appeal before us.<sup>2</sup>

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<sup>2</sup> There is some possibility on this record that Appellants might have presented an argument that the Examiner's reasoning at pages 4-10 of the Examiner's Answer, mailed March 26, 2002, is in effect a "new ground of rejection." It also might have been argued that such a new ground of

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4. Independent claims 10 and 84 under appeal reads as follows:
  10. A method for creating a data base representing a virtual world, the method comprising:
    - receiving a plurality of polygon representations of virtual objects;
    - selecting first and second virtual objects from said plurality of polygon representations of virtual objects;
    - grouping the first and second virtual objects into a three-dimensional grouped object;
    - assigning a grouping hierarchy for the first and second virtual objects, wherein the second virtual object is assigned as the child of the first virtual object; and
    - calculating an orientation and position of the child object relative to the first virtual object.

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rejection was not in compliance with the rules in effect at the time the Examiner's Answer was mailed in March of 2002. Additionally, there is some possibility on this record that Appellants might have argued that the Supplemental Examiner's Answer, mailed July 7, 2006, which restructures the statement of the rejection, is in effect a second "new ground of rejection" and was not in compliance with the rules in effect at the time it was mailed in July of 2006. *See* 37 CFR § 41.43(a)(2) (2006), which became effective on September 13, 2004. In the Reply Briefs, filed June 6, 2002 and September 7, 2006, Appellants did not make any of these arguments or note any procedural objection to the manner in which the Examiner procedurally presented the Examiner's position on appeal. Accordingly, Appellants have waived any procedural error which might have occurred in the manner in which the Examiner handled the appeal.

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84. A computer program for creating a virtual world data base, wherein said computer program is embodied on computer-readable media and comprises instructions configured to:

read polygon representations of a plurality of virtual objects, including a first virtual object, a second virtual object, and a third virtual object;

select the first virtual object and the second virtual object from said plurality of virtual objects;

assign attributes to the first and second virtual objects;

group said first and second virtual objects into a grouped object, wherein said first and second virtual objects intersect;

represent the grouped object by at least one of the following:

a three-dimensional and rotatable wireframe object, and

a three-dimensional and rotatable polygon object;

assign a grouping hierarchy to the first and second virtual objects, wherein the second virtual object is assigned as the child of the first virtual object; and

calculate an orientation and position of the child object relative to the first virtual object.

5. A copy of Appellants' reissue claims 11-46, 48-55, 58-68, 85-94, 97-104, and 106-108 is set forth in the Claim Appendix of Appellants' Brief.

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6. The Examiner rejected reissue claims 10-46, 48-55, 58-68, 84-94, 97-104, and 106-108 under 35 U.S.C. § 251 as being an improper recapture of surrendered subject matter (Supplemental Answer 2-12).

7. Claims 1-9, 56-57, 69-83, and 105 are not rejected.

## II. ISSUES

The sole issue before the Board is whether Appellants have established that the Examiner erred in rejecting claims 10-46, 48-55, 58-68, 84-94, 97-104, and 106-108 under 35 U.S.C. § 251 based on recapture.

## III. FINDINGS OF FACT

The following findings of fact are supported by a preponderance of the evidence.

### A. *The Invention*

1. Appellants invented (U.S. Patent 5,559,995, Abstract):

A method and apparatus for creating virtual worlds wherein a user may begin with a database containing a limited pictorial representation of a desired virtual world and then edit the database to specify the remaining data needed to create the actual virtual world. In one embodiment of the present invention, a database containing a limited pictorial representation of a virtual world is communicated to a receiving unit, and a grouping unit collects various descriptions of the pictorial representation into selected groups. An attribute assigning unit then assigns attributes to the groups. The

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attributes may include group hierarchy, constraints of motion, color, texture or other features. The modified database is then communicated to a data coupling unit which couples real world data to the groups. Finally, a rendering unit renders the virtual world which looks and functions according to the specified attributes and the real world data.

*B. Prosecution history of the original application*

2. The patent sought to be reissued is based on Application 07/939,834, filed September 2, 1992 (which we refer to as the “original application” even though it is the second application in the sequence), as a continuation of Application 07/621,474, filed November 30, 1990, now abandoned.
3. As filed, the original application contained claims 1-7 including representative independent claim 1 which is reproduced below:
  1. An apparatus for creating a virtual world data base, comprising:
    - receiving means for receiving a pictorial representation of the virtual world; and
    - grouping means, coupled to the receiving means, for grouping descriptions of the pictorial representation into selected groups.
4. On June 2, 1994, Appellants filed a Preliminary Amendment adding claims 8-10.
5. On March 15, 1995, the Examiner entered a Non-Final Office Action (“Non-Final Action”).
6. Claims 1-10 were rejected on various grounds.

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7. The prior art relied upon by the Examiner in rejecting the claims was:

Wexelblat	US 5,021,976	Jun. 4, 1991
Richburg	US 5,159,687	Oct. 27, 1992

8. Claims 1-7 were rejected under 35 U.S.C. § 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. § 103 as being unpatentable over Wexelblat (which is prior art under 35 U.S.C. § 102(e)).

9. Claims 8-10 were rejected under 35 U.S.C. § 103 as being unpatentable over Wexelblat and Richburg (which is prior art under 35 U.S.C. § 102(e)).

10. On September 15, 1995, Appellants filed a first Amendment (“the First Amendment”) responding to the Examiner’s Non-Final Action.

11. The First Amendment similarly amended independent claims 1, 7 and 8. Claim 10 was canceled. Amended claim 1 is reproduced below (matter underlined added by the First Amendment):

1. An apparatus for creating a virtual world data base comprising:

receiving means for receiving a pictorial representation of objects in the virtual world; and

grouping means, coupled to the receiving means, for grouping descriptions of the pictorial representation of objects in the virtual world into selected groups of at least one of wireframe objects and polygon objects.

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12. After entry of the First Amendment, the application claims were 1-9.

13. In the First Amendment, Appellants presented arguments with respect to the patentability of amended claims 1, 7, and 8.

14. Appellants' amendments and/or arguments (see below) addressed at least the following limitations of Appellants' amended claim 1:

- (1) pictorial representation of objects in the virtual world;
- (2) at least one of wireframe objects and polygon objects; and
- (3) at least one of wireframe and polygon-based [virtual world];

Limitations (1) and (2) were added to claims 1 and 7 by the First Amendment.

Limitation (3) was added to the "virtual world" found in original claim 8.

15. In the First Amendment at page 6, last three lines, Appellants argued the following:

[Wexelblat's information handling] differs greatly from "a pictorial representation of objects in the virtual world" which are grouped into "at least one of wireframe objects and polygon objects".

The argument directly above addressed Finding of Fact 14 limitations (1) and (2) found in Appellants' amended claims 1 and 7.

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16. In the First Amendment at page 9, Appellants further argued the following:

[Wexelblat] is directed towards the editing of information contained within a cyberspace, as opposed to virtual worlds drawn using wireframe objects and polygon objects.

The argument directly above addressed Finding of Fact 14 limitation (3) found in Appellants' amended claim 8.

17. On December 31, 1995, the Examiner entered a Final Office Action ("Final Action").

18. Amended claims 1-9 were rejected on various grounds.

19. Claims 1-7 were again rejected under 35 U.S.C. § 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. § 103 as being unpatentable over Wexelblat (which is prior art under 35 U.S.C. § 102(e)).

20. Claims 8-9 were again rejected under 35 U.S.C. § 103 as being unpatentable over Wexelblat and Richburg (which is prior art under 35 U.S.C. § 102(e)).

21. On March 4, 1996, the Examiner conducted an interview with Appellants' representative. The Examiner entered an Interview Summary into the record stating:

Examiner and applicant's representative discussed their interpretations of the breadth of Wexelblat's teachings.

22. On April 2, 1996, Appellants filed a Second Amendment ("the Second Amendment") responding to the Examiner's Final Office Action.

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23. The Second Amendment similarly and extensively amended independent claims 1 and 7. Dependent claims 2 and 3 were also amended, claims 8 and 9 were canceled, and new dependent claims 11 and 12 were added. Amended claim 1 is reproduced below (matter underlined added by the Second Amendment and matter in [brackets] deleted by the Second Amendment):

1. An apparatus for creating a virtual world data base, comprising:

receiving means for receiving [a pictorial representation] first, second and third polygon representations of respective first, second and third virtual objects in a [the] virtual world;

selecting means, coupled to said receiving means, for selecting a first edge of said first virtual object and for selecting a second edge of said second virtual object; and

grouping means, coupled to the receiving means and the selecting means, for grouping [descriptions of the pictorial representation of] said first and second virtual objects in the virtual world into a grouped object comprising said first and second virtual objects joined at an intersection of the first and second edges, the grouped object represented by [selected groups of] at least one of a three-dimensional and rotatable wireframe [objects] object and a three-dimensional and rotatable sweep polygon [objects].

24. After entry of the Second Amendment, the application claims were 1-7 and 11-12.

25. In the Second Amendment, Appellants presented extensive arguments with respect to the patentability of amended claims 1 and 7. (Second Amendment 6-17).

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26. Appellants' amendments and/or arguments (see below) addressed at least the following limitations of Appellants' amended claims 1 and 7:

- (A) first, second and third polygon representations of respective first, second and third virtual objects;
- (B) selecting means, coupled to said receiving means, for selecting a first edge of said first virtual object and for selecting a second edge of said second virtual object; and
- (C) a grouped object comprising said first and second virtual objects joined at an intersection of the first and second edges, the grouped object represented by at least one of a three-dimensional and rotatable wireframe object and a three-dimensional and rotatable sweep polygon;

Limitations (A), (B), and (C) were added to claims 1 and 7 by the Second Amendment.

27. In the Second Amendment at pages 7-10, Appellants argued the following as to the amended claims:

Applicants respectfully traverse the rejection in light of the clarifications to Claims 1 and 7. Claim 1 positively recites a "grouping means...for grouping said first and second virtual objects in the virtual world into a grouped object comprising said first and second virtual objects joined at an intersection of the first and second edges, the grouped object represented by at least one of a three-dimensional and rotatable wireframe object and a three-dimensional and rotatable sweep polygon." However, Wexelblat does not disclose such a grouping means. Although the system of Wexelblat teaches shapes and combinations of shapes, Wexelblat does not teach or

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suggest grouping three-dimensional and rotatable wireframe objects or sweep polygons.

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Applicants respectfully submit that Claim 7 is patentable for at least the reasons set forth for the patentability of Claim 1.

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Since Fisher only adds to Wexelblat the teachings of virtual objects, the Official Action has not shown that “grouping means” as positively recited in Claim 1 is taught or suggested by any of the references, or that any of the references suggest modifying the cited references to achieve the positively recited limitation.

The arguments directly above addressed Finding of Fact 26 limitation (C) found in Appellants’ amended claims 1 and 7.

28. On April 9, 1996, a Notice of Allowability was mailed which stated that pending claims 1-7 and 11-12 were allowed.

29. Application claims 1-7 became patent claim 1-7 respectively, and consistent with Office practice, application claims 11-12 were renumbered as patent claims 8-9 in the course of preparing the original application for issue.

30. U.S. Patent 5,559,995 issued September 24, 1996, based on the original application and contained claims 1-9.

### *C. Prosecution of reissue application*

31. Appellants filed reissue application 09/159,509 on September 23, 1998, seeking to reissue U.S. Patent 5,559,995.

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32. Appellants presented original patent claims 1-9 along with new reissue application claims 10-108 for consideration.

33. Ultimately, reissue claims 10-46, 48-55, 58-68, 84-94, 97-104, and 106-108 were rejected.

34. Reissue application claims 10-46, 48-55, 58-68, 84-94, 97-104, and 106-108 are before the Board in the appeal.

35. A copy of the claims 10-46, 48-55, 58-68, 84-94, 97-104, and 106-108 under appeal is set forth in the Claim Appendix of Appellants' Brief.

*D. Examiner's Rejection under 35 U.S.C. § 251*

36. The Examiner has rejected reissue application claims 10-46, 48-55, 58-68, 84-94, 97-104, and 106-108 under 35 U.S.C. § 251 maintaining that the claims seek to "recapture" subject matter surrendered in obtaining allowance of the claims which appear in the patent sought to be reissued.

37. The Examiner based the rejection of claims 10-46, 48-55, 58-68, 84-94, 97-104, and 106-108 on the grounds that when faced in the original application with a rejection under 35 U.S.C. § 102(e) (or in the alternative 35 U.S.C. § 103) over Wexelblat and a rejection under 35 U.S.C. § 103(a) over Wexelblat and Richburg, Appellants made at least three *significant amendments* (on April 2, 1996) to originally filed claim 1 (and claim 7) (Supplemental Answer 5):

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(A) Appellants amended rejected independent claim 1 to add the requirement of “first, second and third polygon representations of respective first, second and third virtual objects”;

(B) Appellants amended rejected independent claim 1 to add the requirement of “selecting means, coupled to said receiving means, for selecting a first edge of said first virtual object and for selecting a second edge of said second virtual object”; and

(C) Appellants amended rejected independent claim 1 to add the requirement of “a grouped object comprising said first and second virtual objects joined at an intersection of the first and second edges, the grouped object represented by at least one of a three-dimensional and rotatable wireframe object and a three-dimensional and rotatable sweep polygon”.

Amended application claim 1 ultimately became patent claim 1.

38. Additionally, the Examiner based the rejection of claims 10-46, 48-55, 58-68, 84-94, 97-104, and 106-108 on the grounds that when faced in the original application with a rejection under 35 U.S.C. § 102(e) (or in the alternative 35 U.S.C. § 103) over Wexelblat and a rejection under 35 U.S.C. § 103(a) over Wexelblat and Richburg, Appellants made *significant arguments* with respect to amended claim 1 (and claim 7) (Supplemental Answer 5:5-11). (See also the Finding of Fact 27 *supra* with respect to Appellants’ arguments regarding claim limitation (C).)

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39. The Examiner reasoned in part as follows (Supplemental Answer 9:4-7 and 11:9-12):

Claims 10, 46, 58, 84, and 97 do not contain at least one, or a portion of at least one, of the three above-noted surrender-generating limitations A, B, and C. Nor do these claims contain any broadened versions of, or substantially equivalent substitutes for, the omitted surrender-generating (relied-on) limitations.

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Claim 102 does not contain a portion of one of the three above-noted surrender generating limitations A, B, and C. Nor does claim 102 contain any broadened version of, or substantially equivalent substitute for, the omitted portion of the surrender generating limitation.

40. The record supports the Examiner's findings with respect to what limitations do not appear in reissue application claims 10-43, 46-55, 58-66, 97-104, and 106-108 which were present in claim 1 (and claim 7) of the original application, as allowed.

41. Dependent claims 44-45, 67-68, and independent claim 84, each on their face contain substantially equivalent substitutes for each of the surrender-generating limitations A, B, and C. (Compare to claims 56-57 and 69 which are not rejected.)

42. The record *does not* support the Examiner's findings with respect to what limitations do not appear in reissue application claims 44-45, 67-68, and 84-94 which were present in claim 1 (and claim 7) of the original application, as allowed.

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#### IV. DISCUSSION – REJECTION UNDER 35 U.S.C. § 251

##### A. *Recapture Principles*

(1)

##### *The statute*

The reissue statute expressly permits a patentee to correct an error thus permitting patentee to obtain reissue claims broader than the originally issued patent claims at any time within two (2) years from the date the original patent issues. More particularly, 35 U.S.C. § 251, ¶¶ 1 and 4, provide in pertinent part:

Whenever any patent is, through error without any deceptive intention, deemed wholly or partly inoperative or invalid, by reason of a defective specification or drawing, or by reason of the patentee claiming more or less than he had a right to claim in the patent, the Director shall, on the surrender of such patent and the payment of the fee required by law, reissue the patent for the invention disclosed in the original patent, and in accordance with a new and amended application, for the unexpired part of the term of the original patent.

No reissued patent shall be granted enlarging the scope of the claims of the original patent unless applied for within two years from the grant of the original patent.

(2)

*Recapture is not an error  
within the meaning of 35 U.S.C. § 251*

What has become known as the “recapture rule,” prevents a patentee from regaining through a reissue patent subject matter that the patentee surrendered in an effort to obtain allowance of claims in the patent sought to

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be reissued. *In re Clement*, 131 F.3d 1464, 1468, 45 USPQ2d 1161, 1164 (Fed. Cir. 1997).

If a patentee attempts to “recapture” what the patentee previously surrendered in order to obtain allowance of original patent claims, that “deliberate withdrawal or amendment ... cannot be said to involve the inadvertence or mistake contemplated by 35 U.S.C. § 251, and is not an error of the kind which will justify the granting of a reissue patent which includes the [subject] matter withdrawn.” *Mentor Corp. v. Coloplast, Inc.*, 998 F.2d 992, 995, 27 USPQ2d 1521, 1524 (Fed. Cir. 1993), quoting from *Haliczer v. United States*, 356 F.2d 541, 545, 148 USPQ 565, 569 (Ct. Cl. 1966).<sup>3</sup> See also *Hester Industries Inc. v. Stein, Inc.*, 142 F.3d 1472, 1480, 46 USPQ2d 1641, 1647 (Fed. Cir. 1998).

(3)

*In re Clement*

The Federal Circuit’s opinion in *Clement* discusses a three-step test for analyzing recapture.

*Step 1* involves a determination of whether and in what aspect any claims sought to be reissued are broader than the patent claims. The Federal Circuit reasoned that a reissue application claim deleting a limitation or

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<sup>3</sup> *Haliczer* is binding precedent. See *South Corp. v. United States*, 690 F.2d 1368, 215 USPQ 657 (Fed. Cir. 1982) (in banc) (decisions of the former U.S. Court of Customs and Patent Appeals and former U.S. Court of Claims decisions are binding precedent).

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element from a patent claim is broader as to that limitation's or element's aspect. 131 F.3d at 1468, 45 USPQ2d at 1164.

*Step 2* involves a determination of whether the broader aspects of the reissue application claims relate to surrendered subject matter. 131 F.3d at 1468-69, 45 USPQ2d at 1164. In this respect, review of arguments and/or amendments during the prosecution history of the application, which matured into the patent sought to be reissued, is appropriate. In reviewing the prosecution history, the Federal Circuit observed that “[d]eliberately canceling or amending a claim in an effort to overcome a [prior art] reference strongly suggests that the Applicant admits that the scope of the claim before cancellation or amendment is unpatentable.” 131 F.3d at 1469, 45 USPQ2d at 1164.

*Step 3* is applied when the broadening relates to surrendered subject matter and involves a determination whether the surrendered subject matter has crept into the reissue application claim. *Id.* The following principles were articulated in *Clement*, 131 F.3d at 1469-70, 45 USPQ2d at 1165:

*Substep (1)*: if the reissue claim is as broad as or broader than the canceled or amended claim in all aspects, the recapture rule bars the claim;

*Substep (2)*: if it is narrower in all aspects, the recapture rule does not apply, but other rejections are possible;

*Substep (3)*: if the reissue claim is broader in some aspects, but narrower in others, then:

(a) if the reissue claim is as broad as or broader in an aspect germane to a prior art rejection, but narrower

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in another aspect completely unrelated to the rejection, the recapture rule bars the claim;

(b) if the reissue claim is narrower in an aspect germane to [a] prior art rejection, and broader in an aspect unrelated to the rejection, the recapture rule does not bar the claim, but other rejections are possible.

(4)

*North American Container*

In *North American Container, Inc. v. Plastipak Packaging, Inc.*, 415 F.3d 1335, 75 USPQ2d 1545 (Fed. Cir. 2005), the Federal Circuit had occasion to further address Substep (3)(a) of *Clement*.

*North American Container* involved a reissue patent, which had been held invalid by the U.S. District Court for the Northern District of Texas. The district court bottomed its invalidity holding based on a violation of the recapture rule. During prosecution of an application for patent, an examiner rejected the claims over a combination of two prior art references: Dechenne and Jakobsen. To overcome the rejection, *North American Container* limited its application claims by specifying that a shape of “inner walls” of a base of a container was “generally convex.” *North American Container* convinced the examiner that the shape of the base, as amended, defined over “both the Dechenne patent, wherein the corresponding wall portions 3 are *slightly concave* ... and the Jakobsen patent, wherein the entire reentrant portion is clearly *concave in its entirety*.” 415 F.3d at 1340, 75 USPQ2d at 1549. After a patent issued containing the amended claims, *North American Container* filed a reissue application seeking reissue claims

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in which (1) the language “inner wall portions are generally convex” was eliminated, but (2) the language “wherein the diameter of said re-entrant portion is in the range of 5% to 30% of the overall diameter of said side wall” was added. Thus, the claim sought to be reissued was broader in some aspects and narrower in other aspects.

The Federal Circuit, applying the *Clement* three-step test, held that the reissue claims were broader in scope than the originally-issued claims in that they no longer require the “inner walls” to be “generally convex.” The Federal Circuit further found that the broadened aspect (i.e., the broadened limitation) “relate[d] to subject matter that was surrendered during prosecution of the original-filed claims.” 415 F.3d at 1350, 75 USPQ2d at 1557. The Federal Circuit observed “the reissue claims were not narrowed with respect to the ‘inner wall’ limitation, thus avoiding the recapture rule.”

The Federal Circuit stated:

[t]hat the reissue claims, looked at as a whole, may be of “intermediate scope” is irrelevant. . . . [T]he recapture rule is applied on a limitation-by-limitation basis, and ... [North American Container’s] deletion of the “generally convex” limitation clearly broadened the “inner wall” limitation.

*Id.* Thus, the Federal Circuit in *North American Container* further refined Substep (3)(a) of *Clement*: “broader in an aspect germane to a prior art rejection” means broader with respect to a *specific* limitation (1) added to overcome prior art in prosecution of the application which matured into the patent sought to be reissued and (2) eliminated in the reissue application claims.

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(5)  
*Ex parte Eggert*

The opinion in *Ex parte Eggert*, 67 USPQ2d 1716 (Bd. Pat. App. & Int. 2003), issued as a precedential opinion, is also part of the recapture precedent applicable to proceedings before the United States Patent & Trademark Office (USPTO). *Eggert* was entered on May 29, 2003, prior to the Federal Circuit's *North American Container* decision. In *Eggert*, a majority stated that “[i]n our view, the surrendered subject matter is the outer circle of Drawing 1 [the rejected claim prior to the amendment that resulted in the claim being issued] because it is the subject matter appellant conceded was unpatentable.” 67 USPQ2d at 1717. The majority further held that “in our view” subject matter narrower than the rejected claim but broader than the patented claim is not barred by the recapture rule. *Id.* The majority explained that if the finally rejected claim was ABC and the patent claim was ABCDEF, there would be recapture for ABC or anything broader than ABC, but not for claims directed to ABCX, ABCD<sub>Br</sub>, ABCEF, or A<sub>Br</sub>BCDEF, because those claims would be narrower than the finally rejected claim ABC. 67 USPQ2d at 1718. In its opinion, the majority recognized that the Federal Circuit had held that “the mere presence of narrowing limitations in the reissue claim is not necessarily sufficient to save the reissue claim from the recapture rule.” 67 USPQ at 1729.

Board of Patent Appeals and Interferences Standard Operating Procedure 2 (Revision 6) (August 10, 2005) mandates that a published precedential opinion of the Board is binding on all judges of the Board

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*unless* the views expressed in an opinion in support of the decision, among a number of things, are inconsistent with a decision of the Federal Circuit. In our view, the majority view in *Eggert* is believed to be inconsistent with the subsequent Federal Circuit decision in *North American Container* with respect to the principles governing application of Substep (3)(a) of *Clement*.

The *Eggert* majority's analysis is believed to be consistent with *North American Container* in that the majority applied the three-step framework analysis set forth in applicable Federal Circuit opinions, *e.g.*, (1) *Pannu v. Storz Instruments, Inc.*, 258 F.3d 1366, 1370-71, 59 USPQ2d 1597, 1600 (Fed. Cir. 2001); (2) *Clement*, 131 F.3d at 1470, 45 USPQ2d at 1165 and (3) *Hester*, 142 F.3d at 148, 46 USPQ2d at 1648-49. However, the *Eggert* majority also held that the surrendered subject matter was the rejected claim only rather than the amended portion of the issued claim. 67 USPQ2d at 1717. At a similar point in the recapture analysis, *North American Container* has clarified the application of the three-step framework analysis. *North American Container* holds that the "inner walls" limitation (a portion of the issued claim that was added to the rejected claim by amendment) was "subject matter that was surrendered during prosecution of the original-filed claims." 415 F.3d at 1350, 75 USPQ2d at 1557.

It is believed that the Substep (3)(a) rationale of the *Eggert* majority (1) is not consistent with the rationale of the Federal Circuit in *North American Container* and (2) should no longer be followed or be applicable to proceedings before the USPTO.

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(6)

*What subject matter is surrendered?*

In a case involving Substep (3)(a) of Step 3 of *Clement*, what is the subject matter surrendered?

Is it

- (1) the subject matter of an application claim which was amended or canceled or
- (2) the subject matter of an application claim which was amended or canceled *and*, on a limitation-by-limitation basis, the territory falling between the scope of
  - (a) the application claim which was canceled or amended and
  - (b) the patent claim which was ultimately issued?

We believe *North American Container* stands for the proposition that it is (2) and not (1). Accordingly, we hold that it is (2).

(7)

*Clement principles are not per se rules*

Our reading of our appellate reviewing court's recapture opinions, as a whole, suggests that the *Clement* steps should not be viewed as per se rules. For example, we note the following in *Clement*, 131 F.3d at 1469, 45 USPQ2d at 1164:

Although the recapture rule does not apply in the absence of evidence that the Appellant's amendment was "an admission

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that the scope of that claim was not in fact patentable,” *Seattle Box Co. v. Industrial Crating & Packing, Inc.*, 731 F.2d 818, 826, 221 USPQ 568, 574 (Fed. Cir. 1984), “the court may draw inferences from changes in claim scope when other reliable evidence of the patentee’s intent is not available,” *Ball [Corp. v. United States]*, 729 F.2d at 1436, 221 USPQ at 294. Deliberately canceling or amending a claim in an effort to overcome a reference strongly suggests that the Appellant admits that the scope of the claim before the cancellation or amendment is unpatentable, but it is not dispositive because other evidence in the prosecution history may indicate the contrary. *See Mentor [Corp. v. Coloplast, Inc.]*, 998 F.2d at 995-96, 27 USPQ2d at 1524-25; *Ball*, 729 F.2d at 1438, 221 USPQ at 296; *Seattle Box Co.*, 731 F.2d at 826, 221 USPQ at 574 (declining to apply the recapture rule in the absence of evidence that the Appellant’s “amendment ... was in any sense an admission that the scope of [the] claim was not patentable”); *Haliczer [v. United States]*, 356 F.2d at 545, 148 USPQ at 569 (acquiescence in the rejection and acceptance of a patent whose claims include the limitation added by the Appellant to distinguish the claims from the prior art shows intentional withdrawal of subject matter); *In re Willingham*, 282 F.2d 353, 354, 357, 127 USPQ 211, 213, 215 (CCPA 1960) (no intent to surrender where the Appellant canceled and replaced a claim without an intervening action by the examiner). Amending a claim “by the inclusion of an additional limitation [has] exactly the same effect as if the claim as originally presented had been canceled and replaced by a new claim including that limitation.” *In re Byers*, 230 F.2d 451, 455, 109 USPQ 53, 55 (CCPA 1956). [Footnote and citations to the CCPA reports omitted.]

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(8)  
*Allocation of burden of proof*

What is the proper allocation of the burden of proof in ex parte examination?

For reasons that follow, we hold that an examiner has the burden of making out a prima facie case of recapture. The examiner can make out a prima facie case of recapture by establishing that the claims sought to be reissued fall within Substeps (1) or 3(a) of Step 3 of *Clement*.

For reasons that follow, we also hold that once a prima facie case of recapture is established, the burden of persuasion then shifts to the Appellants to establish that the *prosecution history* of the application, which matured into the patent sought to be reissued, establishes that a surrender of subject matter did not occur (or that the reissue claims are materially narrowed).

As will become apparent, our rationale parallels the practice in determining whether subject matter is surrendered when a doctrine of equivalents analysis occurs in infringement cases.

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(9)

*Burden of proof analysis*

Our analysis begins with an observation made by our appellate reviewing court in *Hester*, 142 F.3d at 1481-82, 46 USPQ2d at 1649:

[A]s recognized in *Ball*, the recapture rule is based on principles of equity<sup>4</sup> and therefore embodies the notion of estoppel. 729 F.2d at 1439, 221 USPQ at 296. Indeed, the recapture rule is quite similar to prosecution history estoppel, which prevents the application of the doctrine of equivalents in a manner contrary to the patent's prosecution history. *See Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, [520 U.S. 17, 33,] 117 S. Ct. 1040, 1051[, 41 USPQ2d 1865, 1873] (1997). Like the recapture rule, prosecution history estoppel prevents a patentee from regaining subject matter surrendered during prosecution in support of patentability. *See id.*

*Hester* argues that an analogy cannot be made with prosecution history estoppel because the reissue procedure and prosecution history estoppel are the antithesis of one another--reissue allows an expansion of patent rights whereas prosecution history estoppel is limiting. However, *Hester's* argument is unpersuasive. The analogy is not to the broadening aspect of reissue. Rather, the analogy is with the recapture rule, which restricts the permissible range of expansion through

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<sup>4</sup> The reissue statute has been characterized as being remedial in nature, based on fundamental principles of equity and fairness and should be construed liberally. *In re Bennett*, 766 F.2d 524, 528, 226 USPQ 413, 416 (Fed. Cir. 1985) (in banc); *In re Willingham*, 282 F.2d 353, 354-55, 127 USPQ 211, 214 (CCPA 1960). Nevertheless, fairness to the public must also be considered. As stated in *Mentor*, "the reissue statement cannot be construed in such a way that competitors, properly relying on prosecution history, become patent infringers when they do so." 998 F.2d at 996, 27 USPQ2d at 1525.

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reissue just as prosecution history estoppel restricts the permissible range of equivalents under the doctrine of equivalents.

This court earlier concluded that prosecution history estoppel can arise by way of unmistakable assertions made to the Patent Office in support of patentability, just as it can arise by way of amendments to avoid prior art. *See, e.g., Texas Instruments, Inc. v. International Trade Comm'n*, 988 F.2d 1165, 1174, 26 USPQ2d 1018, 1025 (Fed. Cir. 1993).

*See also* Judge Michel's opinion concurring-in-part and dissenting-in-part in *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 234 F.3d 558, 602, 56 USPQ2d 1865, 1899 (Fed. Cir. 2000) (Festo I), *vacated and remanded*, 535 U.S. 722, 122 S. Ct. 1831, 62 USPQ2d 1705 (2002) (Festo II)<sup>5</sup> (Michel, J.):

[T]he law of prosecution history estoppel has developed with equal applicability to reissue patents and original patents whose claims were amended during prosecution. By at least 1879, the Supreme Court recognized that the process of obtaining a reissue patent precluded the patentee from recapturing that which he had disclaimed (i.e., surrendered), through the reissuance process.

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<sup>5</sup> The "Festo" convention used in this opinion is:  
Festo I is the original in banc decision of the Federal Circuit.  
Festo II is the decision of the Supreme Court.  
Festo III is the decision of the Federal Circuit on remand.

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(10)

*Relevance of prosecution history*

“Surrendered subject matter” is defined in connection with prosecution history estoppel in *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 535 U.S. 722, 733-34, 122 S. Ct. 1831, 1838, 62 USPQ2d 1705, 1710-11 (2002) (Festo II):

The doctrine of equivalents allows the patentee to claim those insubstantial alterations that were not captured in drafting the original patent claim but which could be created through trivial changes. When, however, the patentee originally claimed the subject matter alleged to infringe but then narrowed the claim in response to a rejection, he may not argue that the surrendered territory comprised unforeseen subject matter that should be deemed equivalent to the literal claims of the issued patent. On the contrary, “[b]y the amendment [the patentee] recognized and emphasized the difference between the two phrases[,] ... and [t]he difference which [the patentee] thus disclaimed must be regarded as material.” *Exhibit Supply Co. v. Ace Patents Corp.*, 315 U.S. 126, 136-37, 62 S. Ct. 513, 518-19 [52 USPQ 275, 279-80] (1942).

Festo II goes on to comment, 535 U.S. at 737-41, 122 S. Ct. at 1840-42, 62 USPQ2d at 1712-14:

[Prosecution history estoppel’s] reach requires an examination of the subject matter surrendered by the narrowing amendment. [A] complete bar [would avoid] this inquiry by establishing a per se rule; but that approach is inconsistent with the purpose of applying the estoppel in the first place—to hold the inventor to the representations made during the application process and to the inferences that *may reasonably* be drawn from the amendment (emphasis added).

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A patentee's decision to narrow his claims through amendment *may be presumed to be a general disclaimer of the territory between the original claim and the amended claim.* *Exhibit Supply*, 315 U.S., at 136-137, 62 S. Ct. 513 (“By the amendment [the patentee] recognized and emphasized the difference between the two phrases and proclaimed his abandonment of all that is embraced in that difference”). There are some cases, however, where the amendment *cannot reasonably be viewed as surrendering* a particular equivalent. The equivalent may have been unforeseeable at the time of the application; the rationale underlying the amendment may bear no more than a tangential relation to the equivalent in question; or there may be some other reason suggesting that the patentee could not reasonably be expected to have described the insubstantial substitute in question. In those cases *the patentee can overcome the presumption* that prosecution history estoppel bars a finding of equivalence (emphasis added).

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When the patentee has chosen to narrow a claim, *courts may presume* the amended text was composed with awareness of this rule and that the territory surrendered is not an equivalent of the territory claimed. In those instances, however, *the patentee still might rebut the presumption* that estoppel bars a claim of equivalence. The patentee must show that at the time of the amendment one skilled in the art *could not reasonably* be expected to have drafted a claim that would have literally encompassed the alleged equivalent (emphasis added).

The same policy considerations that prevent a patentee from urging equivalents within what the Supreme Court refers to as “surrendered territory” should prima facie prohibit the patentee from being able to claim subject matter within the surrendered territory in reissue. Accordingly, the

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“surrendered subject matter” that may not be recaptured through reissue should be *presumed* to include subject matter broader than the patent claims in a manner directly related to (1) limitations added to the claims by amendment (either by amending an existing claim or canceling a claim and replacing it with a new claim with that limitation) to overcome a patentability rejection and (2) limitations argued to overcome a patentability rejection without amendment of a claim. These presumptions are believed to place practical and workable burdens on examiners and Appellant.

(11)

*Admissible evidence in rebuttal showing*

As in the case of surrender when applying the doctrine of equivalents, a reissue Appellant should have an opportunity to rebut any prima facie case made by an examiner.

What evidence may an Appellant rely on to rebut any prima facie case of recapture?

We hold that the admissible rebuttal evidence generally should be limited to (1) the prosecution history of the application which matured into the patent sought to be reissued and (2) showings related to what was known by a person having ordinary skill in the art at the time an amendment was made. Nevertheless, we will not attempt to divine, at this time, all evidence that might be relevant. As with other issues that come before the USPTO, such as obviousness and enablement, the evidence to be presented will vary on a case-by-case basis, as will the analysis of that evidence.

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“It is clear that in determining whether ‘surrender’ of subject matter has occurred, the proper inquiry is whether an objective observer viewing the prosecution history would conclude that the purpose of the patentee's amendment or argument was to overcome prior art and secure the patent.” *Kim v. ConAgra Foods, Inc.*, 465 F.3d 1312, 1323, 80 USPQ2d 1495, 1502 (Fed. Cir. 2006). Thus, we also hold that an Appellants must show that at the time the amendment was made, an “objective observer” could not reasonably have viewed the subject matter broader than any narrowing amendment as having been surrendered (or that an “objective observer” would view the reissue claims as materially narrowed). The showing required to be made by Appellants are consistent with the public notice function of claims. Nevertheless, some limited extrinsic evidence may be relevant. However, extrinsic evidence unavailable to an “objective observer” at the time of the amendment is not relevant to showing that an “objective observer” could not reasonably have viewed the subject matter as having been surrendered. Limiting the nature of the admissible evidence is believed to be consistent with the Federal Circuit’s decision on remand following *Festo II*. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 344 F.3d 1359, 1367, 68 USPQ2d 1321, 1326 (Fed. Cir. 2003), *cert. denied*, 541 U.S. 988 (2004) (*Festo III*).

On remand, the Federal Circuit notes (*Id.* at 1367-70, 68 USPQ2d at 1326-29):

[W]e reinstate our earlier holding that a patentee’s rebuttal of the *Warner-Jenkinson* presumption is restricted to the evidence

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in the prosecution history record. *Festo* [I], 234 F.3d at 586 & n.6; *see also Pioneer Magnetics*, 330 F.3d at 1356 (stating that only the prosecution history record may be considered in determining whether a patentee has overcome the *Warner-Jenkinson* presumption, so as not to undermine the public notice function served by that record). If the patentee successfully establishes that the amendment was not for a reason of patentability, then prosecution history estoppel does not apply.

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. . . By its very nature, objective unforeseeability depends on underlying factual issues relating to, for example, the state of the art and the understanding of a hypothetical person of ordinary skill in the art at the time of the amendment. Therefore, in determining whether an alleged equivalent would have been unforeseeable, a district court may hear expert testimony and consider other extrinsic evidence relating to the relevant factual inquiries.

. . . As we have held in the *Warner-Jenkinson* context, that reason should be discernible from the prosecution history record, if the public notice function of a patent and its prosecution history is to have significance. *See id.* at 1356 (“Only the public record of the patent prosecution, the prosecution history, can be a basis for [the reason for the amendment to the claim]. Otherwise, the public notice function of the patent record would be undermined.”); *Festo* [I], 234 F.3d at 586 (“In order to give due deference to public notice considerations under the *Warner-Jenkinson* framework, a patent holder seeking to establish the reason for an amendment must base his arguments solely upon the public record of the patent’s prosecution, i.e., the patent’s prosecution history. To hold otherwise--that is, to allow a patent holder to rely on evidence not in the public record to establish a reason for an amendment--would undermine the public notice function of the patent

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record.”). Moreover, whether an amendment was merely tangential to an alleged equivalent necessarily requires focus on the context in which the amendment was made; hence the resort to the prosecution history. Thus, whether the patentee has established a merely tangential reason for a narrowing amendment is for the court to determine from the prosecution history record without the introduction of additional evidence, except, when necessary, testimony from those skilled in the art as to the interpretation of that record.

. . . When at all possible, determination of the third rebuttal criterion should also be limited to the prosecution history record. . . . We need not decide now what evidence outside the prosecution history record, if any, should be considered in determining if a patentee has met its burden under this third rebuttal criterion.

We interpret *Festo III* to generally, perhaps effectively, limit the admissible rebuttal evidence to the prosecution history record and extrinsic evidence related to the knowledge of the hypothetical person of ordinary skill in the art at the time of the amendment. Admitting evidence not available to the public, such as an affidavit of an attorney giving mental impressions from the attorney who made the amendment, would undermine the public notice function of the patent and its prosecution history.

(12)

*Materially Narrowed in Overlooked Aspects*

When reissue claims are narrower than the patent claims with respect to features other than the surrender generating feature, then the reissue

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claims may be materially narrowed relative to the claims prosecuted and issued in the patent, thereby avoiding the recapture rule.

The Federal Circuit in *North American Container* characterized the second and third steps in applying the recapture rule as determining “whether the broader aspects of the reissue claims relate to subject matter surrendered in the original prosecution” and “whether the reissued claims were materially narrowed in other respects, so that the claims may not have been enlarged, and hence avoid the recapture rule.” 415 F.3d at 1349, 75 USPQ2d at 1556 (emphases added), citing for authority *Pannu*, 258 F.3d at 1371, 59 USPQ2d at 1600. The language “materially narrowed in other respects” relates for comparison back to the earlier recited “broader aspects of the reissued claims” (i.e., surrendered subject matter). Thus, by using the phrase “in other respects” to modify “materially narrowed,” the court makes clear that reissue claims will avoid the recapture rule if materially narrowed in respects other than the broader aspects relating to surrendered subject matter. This plain language in *North American Container* indicates that the recapture rule is avoided if the added limitations are a materially narrowing in respects other than the broader aspects relating to surrendered subject matter.

In *Pannu*, the Federal Circuit described the second step of the recapture rule analysis as determining “whether the broader aspects of the reissued claim related to surrendered subject matter.” 258 F.3d at 1371, 59 USPQ2d at 1600 (quoting *Clement*, 131 F.3d at 1468, 45 USPQ2d at

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1164). With regard to the third step, the court stated: “Finally, the Court must determine whether the reissued claims were materially narrowed in other respects to avoid the recapture rule.” *Id.* (emphases added), citing for authority *Hester*, 142 F.3d at 1482-83, 46 USPQ2d at 1649-50; *Clement*, 131 F.3d at 1470, 45 USPQ2d at 1165. As in *North American Container*, the language “materially narrowed in other respects” relates for comparison back to the earlier recited “broader aspects of the reissued claim” (i.e., surrendered subject matter). Again, modification of “materially narrowed” with the phrase “in other respects” clarifies that reissue claims will avoid the recapture rule if materially narrowed in respects other than the broader aspects relating to surrendered subject matter.

Similarly, in *Hester Indus.*, the Federal Circuit determined that “surrendered subject matter - i.e., cooking other than solely with steam and with at least two sources of steam – has crept into the reissue claims [because] [t]he asserted reissue claims are unmistakably broader in these respects.” 142 F.3d at 1482, 46 USPQ2d at 1649. Immediately after making this determination, the court then stated: “Finally, because the recapture rule may be avoided in some circumstances, we consider whether the reissue claims were materially narrowed in other respects.” *Id.* (emphases added). Yet again, the language “materially narrowed in other respects” relates for comparison back to the earlier recited language “[t]he asserted reissue claims are unmistakably broader in these respects.” It follows that *Hester Indus.* also makes clear that a reissue claim will avoid the recapture rule if

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materially narrowed in respects other than the broader aspects relating to surrendered subject matter.

There is a reason the Federal Circuit has repeatedly assessed recapture rule avoidance in terms of whether the reissue claims were materially narrowed in respects other than the broader aspects relating to surrendered subject matter. The reason involves the purpose served by permitting the recapture rule to be avoided under certain circumstances. This purpose is described in *Hester Indus.* as follows:

[T]his principle [i.e., avoidance of the recapture rule], in appropriate cases, may operate to overcome the recapture rule when the reissue claims are materially narrower in other overlooked aspects of the invention. The purpose of this exception to the recapture rule is to allow the patentee to obtain through reissue a scope of protection to which he is rightfully entitled for such overlooked aspects.

142 F.3d at 1482-83, 46 USPQ2d at 1649-50.

As explained in *Hester Indus.*, the recapture rule is avoided when two conditions are satisfied. First, an aspect of the invention must have been overlooked (e.g., not claimed) during patent prosecution. Second, the reissue claim must have been materially narrowed with respect to this overlooked aspect of the invention. Because recapture rule avoidance requires the reissue claim to be materially narrowed in an overlooked aspect of the invention, this material narrowing must be in respects other than the broader aspects relating to surrendered subject matter. Stated differently, a material narrowing in an overlooked aspect cannot possibly relate to

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surrendered subject matter since this subject matter, having been claimed and then surrendered during original prosecution, could not have been overlooked.

In *Pannu*, the Federal Circuit stated that “[t]he narrowing aspect of the claim on reissue ... was not related to the shape of the haptics, but rather the positioning and dimensions of the snag resistant means [, and] [t]herefore, the reissued claims were not narrowed in any material respect compared to their broadening.” 258 F.3d at 1372, 59 USPQ2d at 1600-01. If read in a vacuum, this statement might appear to support a contrary result to our analysis. However, the court’s opinion in general and this statement in particular must be read, not in a vacuum but, in light of the facts of the case on appeal.

The reissued claim in *Pannu* was narrowed by requiring the snag resistant means to be “at least three times greater” than the width of the haptics and by requiring the snag resistant means to be “substantially coplanar” with the haptics. 258 F.3d at 1372, 59 USPQ2d at 1600. As revealed in the underlying District Court decision, these same or similar limitations were present in claims throughout prosecution of the original patent application. *Pannu v. Storz Instruments, Inc.*, 106 F. Supp. 2d 1304, 1308 (S.D Fla. 2000). For this reason, the District Court held that the recapture rule had not been avoided because the narrowing limitations were not overlooked aspects of the invention and did not materially narrow the claim. *Id.*, 106 F. Supp 2d at 1308-09, citing for authority *Hester Indus.*,

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142 F.3d at 1483, 45 USPQ2d at 1650 and *Clement*, 131 F.3d at 1469, 45 USPQ2d at 1165.

This factual background more fully illuminates the Federal Circuit's determination in *Pannu* that the reissued claims were not narrowed in any material respect compared with their broadening. This determination is not based on the fact that the narrowing limitations of the reissue claims were unrelated to their broadening. Rather, it is based on the fact that these same or similar limitations had been prosecuted in the original patent application and therefore were not overlooked aspects of the invention and did not materially narrow the reissue claims.

The reissue claims in *Clement* were both broader and narrower in aspects germane to a prior art rejection. 131 F.3d at 1470, 45 USPQ2d at 1165. However, the narrower limitation recited in the *Clement* reissue claims ("at least 59 ISO in the final pulp"; see clause (e) of reissue claim 49) also was recited in the patent claims (see clause (f) of patent claim 1). 131 F.3d at 1470, 1474, 45 USPQ2d at 1165, 1169. Therefore, the narrowing limitation of *Clement*, like *Pannu*, was not overlooked during original prosecution and did not materially narrow the reissue claim.

Additionally, in setting forth the test for recapture *Clement* states in part that "if the reissue claim is narrower in an aspect germane to prior art rejection, and broader in an aspect unrelated to the rejection, the recapture rule does not bar the claim" and specifically states that "*Ball* is an example of (3)(b)." 131 F.3d at 1470, 45 USPQ2d at 1165. The claims before the court in *Ball* were determined by the trial judge to be materially narrower as

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to a feature not found in the originally prosecuted claims and were determined by the Examiner to distinguish over the prior art. See *Ball Corporation v. The United States*, 219 USPQ 73, 79 (Cl. Ct. 1982). (“[T]he new reissue claims recite structure never before recited in any claim presented during the prosecution of the original case. These recitations appear, on their face, to be substantial.”)

Finally, in *Mentor*, each of the limitations added to the reissue claims were thoroughly analyzed and determined to not be materially narrowing because the same or similar features were in the patent claims or the prior art. *Mentor*, 998 F.2d at 996, 27 USPQ2d at 1525-26. It follows that the reissue claims of *Mentor*, like those of *Pannu* and *Clement*, failed to avoid the recapture rule because they had been broadened to include surrendered subject matter but had not been narrowed in any material respect.

In summary, the recapture rule is avoided if the reissue claim was materially narrowed in other respects compared to its broadening surrendered aspect. A reissue claim is materially narrowed and thus avoids the recapture rule when limited to aspects of the invention:

- (1) which had not been claimed and thus were overlooked during prosecution of the original patent application;<sup>6</sup> and

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<sup>6</sup> For a patent containing only apparatus claims, it might be argued that reissue method claims cannot involve surrendered subject matter where no method claim was ever presented during prosecution of the patent. However, surrender is not avoided merely by categorizing a claimed invention as a method rather than an apparatus. It is the scope of a claimed

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(2) which patentably distinguish over the prior art.

(13)

*Non-relevance of “intervening rights”*

We have not overlooked a possibility that an argument might be made that the so-called intervening rights provision relating to reissues makes jurisprudence on the doctrine of equivalents presumption inapplicable to reissue recapture rules. Our answer as to the argument is similar to the answer given by the Federal Circuit in *Hester* with respect to whether the doctrine of equivalents surrender principles have any applicability to reissue surrender principles. *Hester* squarely held that they do. Moreover, mixing “intervening rights” with “surrender” is like mixing apples with oranges or putting the cart before the horse. A patentee seeking a reissue claim which is barred by recapture is not entitled to a reissue patent under 35 U.S.C. § 251. If there is no reissue patent, there can be no intervening rights.

(14)

*Public Notice*

We believe that any recapture analysis must be bottomed principally on a “public notice” analysis which can occur only after a record becomes “fixed.” In the case of a patent, the “claims” and the “prosecution history” become fixed at the time the patent is issued--not during “fluid” patent

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invention, not its categorization, which determines whether surrendered subject matter has crept into a reissue claim.

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prosecution where claims and arguments can change depending on the circumstances, *e.g.*, prior art applied and amendments to claims. It is from a fixed perspective that the public (not the patentee) must make an analysis of what the patentee surrendered during prosecution. Moreover, Appellants (not the public) control what amendments and arguments are presented during prosecution. When an amendment or argument is presented, it is the Appellants that should be in the best position to analyze what subject matter (i.e., territory to use the Supreme Court's language) is being surrendered (or explain why the reissue claims are materially narrowed).

Our belief is supported by what appears to be dicta in *MBO Laboratories, Inc. v. Becton, Dickinson & Company*, 474 F.3d 1323, 1331-32, 81 USPQ2d 1661, 1666-67 (Fed. Cir. 2007):

The recapture rule is a limitation on the ability of patentees to broaden their patents after issuance. . . . Section 251 is “remedial in nature, based on fundamental principles of equity and fairness, and should be construed liberally.” However, the remedial function of the statute is limited. Material which has been surrendered in order to obtain issuance cannot be reclaimed via Section 251: . . . It is critical to avoid allowing surrendered matter to creep back into the issued patent, since competitors and the public are on notice of the surrender and may have come to rely on the consequent limitations on claim scope. . . . (“[T]he recapture rule ... ensur[es] the ability of the public to rely on a patent’s public record.”). The public’s reliance interest provides a justification for the recapture rule that is independent of the likelihood that the surrendered territory was already covered by prior art or otherwise unpatentable. The recapture rule thus serves the same policy as does the doctrine of prosecution history estoppel: both operate,

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albeit in different ways, to prevent a patentee from encroaching back into territory that had previously been committed to the public. (citations omitted.)

B. § 251- *The Examiner's Prima Facie Case*

Our Findings of Fact 37-39 set out the basis upon which the Examiner originally made a recapture rejection in the Final Office Action. As noted in Finding of Fact 40, the record supports the Examiner's findings with respect to claims 10-43, 46-55, 58-66, 97-104, and 106-108.

Our Finding of Fact 41 sets out an error in the Examiner's basis for the recapture rejection of claims 44-45, 67-68, and 84. As noted in Finding of Fact 40, the record *does not* support the Examiner's findings with respect to claims 44-45, 67-68, and 84-94.

Basically, in the application which matured into the patent now sought to be reissued, the Examiner rejected originally filed independent claims 1 and 7 over the prior art. Appellants proceeded to re-write application claims 1 and 7 by adding new limitations. Amended application claims 1 and 7 ultimately issued as patent claims 1 and 7.

The Examiner made three points in Findings of Fact 37-39:

- (1) when faced with a Final rejection in the original application,  
Appellants made a three *significant* amendments (See Findings of Fact 37 (A)-(C));

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- (2) when faced with a Final rejection in the original application, Appellants made *significant* arguments (See Finding of Fact 38 and Finding of Fact 27);
- (3) reissue claims 10, 46, 58, 97, and 102 are broader than the original patent claims with respect to almost all the limitations added and arguments made to overcome the rejection (See Findings of Fact 37-39).

The Examiner's accurate factual analysis with respect to claims 10-43, 46-55, 58-66, 97-104, and 106-108 demonstrates that the Examiner has made out a prima facie case of recapture consistent with the test set forth in *Clement* and amplified in *Hester*.

Further, we hold that with respect to the Examiner's rejection of claims 10-43, 46-55, 58-66, 97-104, and 106-108, the burden of persuasion now shifts to the Appellants to establish that the *prosecution history* of the application, which matured into the patent sought to be reissued, establishes that a surrender of subject matter did not occur or that the reissued claims were materially narrowed.

The Examiner's *erroneous* factual analysis with respect to claims 44-45, 67-68, and 84-94 demonstrates that the Examiner has *not* made out a prima facie case of recapture for claims 44-45, 67-68, and 84-94.

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C. § 251 - Appellants' Response<sup>7</sup>

(1)

*Per Se Rule and Ex Parte Eggert*

With respect to independent claims 10-43, 46-55, 58-66, 97-104, and 106-108, Appellants argue that the Board should not impose a per se recapture rule. We agree. See our discussion at Section IV. A. *supra*.

Appellants also argue that *Ex Parte Eggert*, 67 USPQ2d 1716 (BPAI 2003), is controlling. We disagree. See our discussion at Section IV. A. (5) *supra*. The rationale of *Eggert* is not consistent with the rationale of the Federal Circuit in *North American Container* and should no longer be followed or be applicable to proceedings before the USPTO.

(2)

*Appellants' Patentability Arguments in the Original Application*

Appellants' argue at pages 4-5 of the Supplemental Reply Brief, that the arguments presented in the original application, by Appellants in support of the amended claims which were allowed, were limited solely to "grouping representations of virtual objects" into "a group represented by a three-dimensional object." We disagree.

Appellants' argument does not establish that the extensive amendments and more than 10 pages of remarks in the April 2, 1996 Amendment after Final (the Second Amendment) were so limited. For

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<sup>7</sup> Appellants' response is contained in the Brief filed Oct. 9, 2001, Reply Brief filed June 6, 2002, and Supplemental Reply Brief filed Sept. 7, 2006.

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example, our Finding of Fact 27 shows that Appellants specifically argued Limitation C to distinguish over the prior art. Yet Appellants fail to address this in their appeal arguments.

We conclude that “an objective observer viewing the prosecution history would conclude that the purpose of the patentee’s amendment or argument was to overcome prior art and secure the patent.” *Kim v. ConAgra Foods, Inc.*, 465 F.3d at 1323, 80 USPQ2d at 1502. We also conclude that Appellants have not shown that at the time the amendment or argument was made, an “objective observer” could not reasonably have viewed the subject matter broader than the amended and/or argued limitation(s) as having been surrendered.

Appellants also argue (e.g. Brief 10-11) that some of the limitations (e.g. Limitation B) were not argued, and thus the recapture rule does not apply. We disagree.

The fact that no arguments were made as to a particular limitation does not help Appellants rebut the presumed surrender because surrender may occur based solely on an amendment of the claim. See our discussion at Section IV. A. (3) *supra*. Either an amendment or an argument or both may result in surrender. Again, we reiterate that Appellants have not shown that at the time the amendment or argument was made, an “objective observer” could not reasonably have viewed the subject matter broader than the amended and/or argued limitation(s) as having been surrendered.

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(3)  
*Surrendered Subject Matter*

Appellants argue (e.g. Supplemental Reply Br. 5) that only the claims prior to the April 2, 1996 Amendment are the subject matter which was surrendered by Appellants during the prosecution. We disagree. See our discussion at Section IV. A. (6) *supra*. We conclude the surrendered subject matter also includes, on a limitation-by-limitation basis, the territory falling between the scope of (a) the application claim which was canceled or amended and (b) the patent claim which was ultimately issued.

(4)  
*Materially Narrowed*

Appellants argue that “the present reissue claims present a situation similar to the reissue claims [in] *Ball* . . . where the reissue claims were materially more narrow than the surrendered claim and thus held to not be subject to the recapture rule.” (Br. 9). Further, Appellants argue that recapture is avoided because (Supplemental Reply Br. 6):

All of the independent claims of the present reissue application have been materially narrowed with respect to the surrendered claim.

We disagree. As discussed at Section IV. A. (12) *supra*, a reissue claim is materially narrowed and thus avoids the recapture rule when limited to aspects of the invention (1) which had not been claimed and thus were

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overlooked during prosecution of the original patent application; and (2) which patentably distinguish over the prior art.

Originally prosecuted claims 2 and 3 (now patent claims 2 and 3) recite in part (emphasis added):

attribute assigning means, coupled to the grouping means, for assigning attribute to the first and second edges of the first and second virtual objects, the attribute means including hierarchy means for *assigning a grouping hierarchy for the first and second virtual objects wherein the second virtual object is assigned as a child object of the first virtual object and wherein an orientation and a position of the child object is calculated relative to the first virtual object.*

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attribute assigning means further comprises:

origin assigning means for assigning an origin on the first virtual object around which the third virtual object can rotate; and

constraint assigning means for assigning a three-dimensional constraint of motion to the third virtual object to constrain how the third virtual object can rotate with respect to the first virtual object.

See also originally prosecuted and patented claims 1 and 4-9.

Appellants fail to point out any materially narrowed overlooked aspect that is claimed in reissue claims 10-43, 46-55, 58-66, 97-104, and 106-108. To the contrary Appellants point to limitations already found in the patent claims (e.g. Br. 10:5-9) and argue that such limitation (e.g. the “three-dimensional” group) is a materially limitation as to the reissue claims. We reiterate that we do not agree.

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We conclude the argued limitations are not aspects overlooked in the original prosecution. Since this conclusion is dispositive, so we need not reach a conclusion here on whether this feature patentably distinguishes over the prior art. We conclude that with respect to this argument Appellants have not rebutted the Examiner's prima facie showing of recapture.

## VI. CONCLUSIONS OF LAW

(1) Appellants have failed to establish that the Examiner erred in rejecting claims 10-43, 46-55, 58-66, 97-104, and 106-108 under 35 U.S.C. § 251 based on recapture. Specifically:

(a) Appellants' arguments have not rebutted the presumption, upon which the Examiner's rejection is based, i.e., that at the time of the amendment an objective observer would reasonably have viewed the subject matter of the narrowing amendment and limitations argued in the original application as having been surrendered.

(b) Appellants' arguments have not established that the reissue claims are materially narrowed with respect to an overlooked aspect of the invention.

(2) Claims 10-43, 46-55, 58-66, 97-104, and 106-108 are not patentable.

(3) Appellants have established that the Examiner erred in rejecting claims 44-45, 67-68, and 84-94 under 35 U.S.C. § 251 based on recapture.

(4) On the record before us, claims 44-45, 67-68, and 84-94 have not been shown to be unpatentable.

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## VII. DECISION

Upon consideration of the record, and for the reasons given, we affirm the rejection of claims 10-43, 46-55, 58-66, 97-104, and 106-108 under 35 U.S.C. § 251 based on recapture; and we reverse the rejection of claims 44-45, 67-68, and 84-94 under 35 U.S.C. § 251 based on recapture.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED-IN-PART

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McKelvey, *Senior Administrative Patent Judge*, concurring.

I join the majority opinion authored by Judge MacDonald.

As this case demonstrates, there is a good faith debate among the judges of the Board of Patent Appeals and Interferences on how recapture issues should be resolved when, as here, there is both a broadening and narrowing limitation in a claim sought to be reissued vis-à-vis a patent claim narrowed in the face of a prior art rejection during prosecution of the application which matured into the patent. As Judge MacDonald's majority opinion and Judge Blankenship's dissent demonstrate, cogent arguments can be made on both sides of the debate. *See also Ex parte Kraus*, No. 2005-0841 Paper 50 (Bd. Pat. App. & Int. Apr. 7, 2005, *subsequent opinion*, No. 2005-0841, Paper 52 (Bd. Pat. App. & Int. Sep. 21, 2006) (*available at [http://www.uspto.gov/web/offices/dcom/bpai/informative\\_opinions.html](http://www.uspto.gov/web/offices/dcom/bpai/informative_opinions.html)*)).

The *ex parte* patent system is set up to permit an applicant dissatisfied with our decision to seek judicial review. 35 U.S.C. § 141 (Federal Circuit) and § 145 (district court). The examiner cannot seek judicial review. For practical reasons based on long-standing *stare decisis* and Anglo-Saxon jurisprudential considerations, the Board gives binding effect to decisions of its appellate reviewing courts—the Federal Circuit and where applicable the Supreme Court.

In the absence of binding Federal Circuit or Supreme Court precedent, the Board has a process for adopting a Board decision as "binding" precedent at the Board level. *Ex parte Eggert*, 67 USPQ2d 1716 (Bd. Pat. App. & Int. 2003), is an example of "binding" Board precedent. However,

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Board precedent—binding or otherwise—does not, and cannot, bind the Federal Circuit just as Federal Circuit precedent does not bind the Supreme Court.

A difficult situation arises when (1) a Federal Circuit decision is entered subsequent to a decision by the Board to adopt a Board decision as "binding" and (2) the Federal Circuit decision may be "inconsistent" with our "binding" Board decision. If the Federal Circuit decision is "on all fours" factually, then our "binding" "precedent" is no longer viable and should not be followed. Even if a subsequent Federal Circuit is not on all fours, an argument can be made that we should reevaluate our position in the face of Federal Circuit authority. *Cf. Teva Pharmaceuticals USA, Inc. v. Novartis Pharmaceuticals Corporation*, 482 F.3d 1330, 13247 (Fed. Cir. 2007) (Friedman, Senior Circuit Judge, concurring). At this point in time, some judges at the Board are of the opinion that *North American Container, Inc. v. Plastipak Packaging, Inc.*, 415 F.3d 1335, 75 USPQ2d 1545 (Fed. Cir. 2005), has rendered *Ex parte Eggert* no longer viable. A judge of the Board having an opinion that *North American* trumps *Eggert* may legitimately decline to follow *Eggert*.

The patent system is a tool designed by Congress to advance the economic well-being of the Nation. The system does not work efficiently when applicants, attorneys and the public (including potential infringers and licensees of patents) have difficulty understanding and applying the "rule of law" applicable to a set of facts. In this case, the set of facts is a claim in a

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reissue application which narrows in one respect and broadens in another respect.

We can, of course, "guess" how the Federal Circuit might come out on any particular issue. If we guess wrong, and a patent issues, then the very issue on which we guessed can come up again *inter partes* in a civil action for infringement. Our guess would not bind the Federal courts. *Cf.* *Keystone Bridge Co. v. Phoenix Iron Co.*, 5 Otto (95 U.S.) 274, 279 (1877); *Reckendorfer v. Faber*, 2 Otto (92 U.S.) 347, 350 (1975); *Sze v. Block*, 485 F.2d 137, 173 USPQ 498 (CCPA 1972); *Switzer v. Sockman*, 333 F.2d 935, 142 USPQ 226 (CCPA 1964); *Turchan v. Bailey Meter Co.*, 167 F. Supp. 58, 119 USPQ 165 (D. Del. 1958). A civil action for infringement is an expensive proposition, not only for the parties, but for a district court. On the other hand, a direct appeal of our decision to the Federal Circuit is less expensive and does not involve the need for the private third-parties to use their financial and personnel resources.

Given the reasonable debate within the Board as to the proper outcome in a case such as that before us, my view is that we should "affirm" and give the applicant an opportunity to seek judicial review at a time when it is least inconvenience to the system, the public, and the courts. While I agree with Judge MacDonald's opinion, I cannot say that Judge Blankenship does not have a point. Whether a Federal Circuit three-judge or *en banc* panel would agree with our majority opinion or Judge Blankenship's contrary opinion is not for me to say. If I had a magic wand, I would wave it and certify the question involved in this case to the Federal Circuit. *Cf.* 28

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U.S.C. 1292(b) and Fed. R. App. P. 5(a)(3). But, I have not been favored with a magic wand, and more to the point, the statute and rules do not authorize the Board to certify a question to the Federal Circuit.

Accordingly, it is my view that we should continue to affirm rejections raising issues similar to those on appeal, even if fairly debatable, until an appeal is taken to the Federal Circuit and the Federal Circuit is able to resolve the issue. A decision by the Federal Circuit would assist the Patent Office in resolving these somewhat complicated recapture issues.

I respectfully urge applicant to consider an appeal to the Federal Circuit.

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BLANKENSHIP, *Administrative Patent Judge*, concurring-in-part and dissenting-in-part.

Because under our precedents claims 10-43, 46-55, 58-66, 97-104, and 106-108 have been materially narrowed in other respects to avoid recapture under 35 U.S.C. § 251, I respectfully dissent from the majority's decision to sustain the rejection of those claims.

*How may a reissue claim be materially narrowed  
“in other respects” to avoid the recapture rule?*

Application of the recapture rule is a three-step process. The first step is to determine whether and in what aspect the reissue claims are broader than the patent claims. The second step is to determine whether the broader aspects of the reissued claim related to surrendered subject matter. Finally, the court must determine whether the reissued claims were materially narrowed in other respects to avoid the recapture rule.

*Pannu v. Storz Instruments, Inc.*, 258 F.3d 1366, 1371, 59 USPQ2d 1597, 1600 (Fed. Cir. 2001) (internal quotations and citations omitted).

The inquiry into if a reissue claim has been materially narrowed “in other respects” to avoid the recapture rule may begin with consideration of whether the subject matter of the claims that were canceled or amended in the original application has been surrendered. “Once we determine that an applicant has surrendered the subject matter of the canceled or amended claim, we then determine whether the surrendered subject matter has crept

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into the reissue claim.” *In re Clement*, 131 F.3d 1464, 1469, 45 USPQ2d 1161, 1164 (Fed. Cir. 1997).

When a reissue claim is broader than a canceled or amended claim in some aspects, but narrower in others, *Clement* instructs us in a way to determine whether the surrendered subject matter has crept into the reissue claim. The Federal Circuit in *Clement* referred to two earlier cases as examples of how the recapture rule relates to broad and narrow aspects of reissue claims as compared to claims in the original application.

In *Mentor Corp. v. Coloplast, Inc.*, 998 F.2d 992, 27 USPQ2d 1521 (Fed. Cir. 1993), the issued claim was directed to a condom catheter, reciting an adhesive means that was transferred from an outer to an inner surface without turning the condom inside-out. In making amendments to the claim, the applicant argued that none of the applied references showed the transfer of adhesive from the outer surface to the inner surface as the sheath is rolled up and then unrolled. The reissue claim eliminated the limitation that adhesive was transferred from the outer to the inner layer, making the reissue claim broader than the canceled claim in this aspect. The reissue claim was also narrower than the canceled claim because it recited that the catheter included a thin, flexible cylindrical material rolled outwardly upon itself to form a single roll. Although the “flexible” and “single roll” limitations made the reissue claim narrower than both the canceled and issued claims, the reissue claim did not escape the recapture rule because the limitations did not “materially narrow the claim.” *In re Clement* at 1469-70,

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45 USPQ2d at 1165. *See also Mentor Corp.* at 993, 995-97, 27 USPQ2d at 1523-26.

In *Ball Corp. v. United States*, 729 F.2d 1429, 221 USPQ 289 (Fed. Cir. 1984), the issued claim recited “a plurality of feedlines” and a “substantially cylindrical conductor.” The canceled claim recited “feed means includ[ing] at least one conductive lead” and a “substantially cylindrical conductor.” The prosecution history showed that the patentee added the “plurality of feedlines” limitation in an effort to overcome a prior art rejection, but the cylindrical configuration limitation was not added to overcome a prior art rejection nor argued to distinguish over a reference. The reissue claim included limitations not present in the canceled claims that related to the feed means element, but allowed for multiple feedlines. The reissue claim was narrower than the canceled claim with respect to the feed means aspect. The reissue claim deleted the cylindrical configuration limitation, which made the claim broader with respect to the configuration of the conductor. The reissue claim was allowed because the patentee “was not attempting to recapture surrendered subject matter.” *In re Clement* at 1470, 45 USPQ2d at 1165. *See also Ball Corp.* at 1432-33, 1437, 221 USPQ at 291-92, 295.

In both *Mentor* and *Ball*, the relevance of the prior art rejection to the aspects narrowed in the reissue claim was an important factor in our analysis. From the results and reasoning of those cases, the following principles flow: (1) if the reissue claim is as broad as or broader than the canceled or amended

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claim<sup>8</sup> in all aspects, the recapture rule bars the claim; (2) if it is narrower in all aspects, the recapture rule does not apply, but other rejections are possible; (3) if the reissue claim is broader in some aspects, but narrower in others, then: (a) if the reissue claim is as broad as or broader in an aspect germane to a prior art rejection, but narrower in another aspect completely unrelated to the rejection, the recapture rule bars the claim; (b) if the reissue claim is narrower in an aspect germane to prior art rejection, and broader in an aspect unrelated to the rejection, the recapture rule does not bar the claim, but other rejections are possible. *Mentor* is an example of (3)(a); *Ball* is an example of (3)(b).

*In re Clement* at 1470, 45 USPQ2d at 1165 (footnote added).

In *Ex parte Eggert*, 67 USPQ2d 1716 (Bd. Pat. App. & Int. 2003) (precedential), an expanded panel of the Board determined that the reissue claims had been narrowed in the same aspect (i.e., the shape of the retaining member) in which they were broadened with regard to a patent claim. The Board found that the applicant for reissue had presented claims that were narrower than the surrendered subject matter in an aspect germane to the prior art rejection and broader only in aspects unrelated to the rejection. According to the Board, the recapture rule did not bar the claims because the

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<sup>8</sup> The “canceled or amended claim” is the claim that was canceled or amended. “Once we determine that an applicant has surrendered the subject matter of the canceled or amended claim, we then determine whether the surrendered subject matter has crept into the reissue claim” (emphasis added). *In re Clement* at 1469, 45 USPQ2d at 1164. In *Clement*, the Federal Circuit compared the reissue claim with the corresponding application claim as it stood before the amendments added during prosecution. See *In re Clement* at 1470-71, 45 USPQ2d at 1165-66.

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facts fell into category 3(b) as described by Clement. *Eggert*, 67 USPQ2d at 1731-32.

In the instant case, Appellants appear to have been careful to provide “replacement” limitations for the limitations that were added during prosecution in response to prior art rejection. The “replacement” limitations are broader versions of the original limitations that were added. Even though the instant reissue claims were submitted before the Board’s decision in *Eggert*, the claims appear to avoid recapture consistent with *Eggert* and consistent with current USPTO policy. In accordance with the holding of *Eggert*, there is no recapture when the reissue claims retain, in broadened form, the limitation added (or argued) to overcome a prior art rejection in the original prosecution. *See Manual of Patent Examining Procedure* § 1412.02, p. 1400-23, under heading “(d) Reissue Claims Broader in Scope in Area Directed to Amendment/Argument Made to Overcome Art Rejection in Original Prosecution; but Reissue Claims Retain, in Broadened Form, the Limitation(s) Argued/Added to Overcome Art Rejection in Original Prosecution:” (8th Ed., Rev. 5, Aug. 2006).<sup>9</sup>

The majority considers *Eggert* to be inconsistent with the later Federal Circuit decision in *North American Container, Inc. v. Plastipak Packaging, Inc.*, 415 F.3d 1335, 75 USPQ2d 1545 (Fed. Cir. 2005). In my view, the

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<sup>9</sup> On this record, it is not clear why this case is before the Board. However, the Examiner found (Supplemental Answer 11-12) that the surrender-generating limitations added during prosecution were omitted in their entirety; i.e., that the facts fall into category 3(a) as described by Clement, where claims *are* properly rejected for recapture.

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holding of *Eggert* has not been overruled by *North American Container*, or any other Federal Circuit decision after *Eggert*, because our reviewing court has not since ruled on a recapture case where a different limitation is submitted as a substitute for a limitation that was added in response to a rejection during the original prosecution. In other words, the *Eggert* facts fell within category 3(b) as described by *Clement*. The *North American Container* facts fell within category 3(a) as described by *Clement* -- i.e., in the reissue claims the limitation added during prosecution was missing in its entirety.<sup>10</sup>

I have no disagreement with the majority's rejection of the *Eggert* rationale that is reproduced at part IV.A.(5) *supra*. The statements from *Eggert* are mere dicta that were never followed by the Office. However, in relation to the cited Standard Operating Procedure of the Board (SOP2.VI.D (Rev. 6, Aug. 2005)), the *decision* supported by the *Eggert* opinion is not

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<sup>10</sup> An argument can be made that in *North American Container* the limitation requiring that the "inner walls" be "generally convex" (patent claim 1) was substituted by a related limitation in the reissue claim (29), "wherein the diameter of said re-entrant portion is in the range of 5% to 30% of the overall diameter of said side wall." *North American Container* at 1341-42, 75 USPQ2d at 1550. The "re-entrant portion" included the lowermost points of the inner walls. *Id.* at 1348, 75 USPQ2d at 1555. However, it appears the claims were not argued as being materially narrowed in other respects to avoid recapture. *See id.* at 1349-40, 75 USPQ2d at 1556. Moreover, the "re-entrant portion" limitation in the reissue claim was already present in patent claims depending from a patent claim containing the limitation requiring that the inner wall portions be "generally convex" (*see id.* at 1341-42, 75 USPQ2d at 1549-50), and thus would not have been the type of substitute found to avoid recapture in *Eggert* or *Ball Corp.*

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inconsistent with any known Federal Circuit *decision*. *Eggert* thus remains precedent binding on this Board.

Certainly, language in recent Federal Circuit cases reflects a shift in emphasis in the recapture inquiry, casting doubt on the continuing viability of earlier precedents such as *Ball Corp.* See, e.g., *North American Container* at 1350, 75 USPQ2d at 1557:

Moreover, that the reissue claims, looked at as a whole, may be of “intermediate scope” is irrelevant. As the district court recognized, the recapture rule is applied on a limitation-by-limitation basis, and the applicant’s deletion of the “generally convex” limitation clearly broadened the “inner wall” limitation.

*Cf. Ball Corp.* at 1437, 221 USPQ at 295:

The proper focus is on the *scope* of the claims, not on the individual *feature* or *element* purportedly given up during prosecution of the original application. The trial judge quite properly focused on the scope of the claims and we find no error in this respect. He determined that the reissue claims were intermediate in scope -- broader than the claims of the original patent yet narrower than the canceled claims.

Presented with an *Eggert* set of facts, the Federal Circuit today might very well reach a conclusion different from the Board. *Eggert* represents an approach that does, to some extent, simplify the job of the patent examiner. However, *Eggert*, by its holding, endorses a *per se* rule that applicants need only add a broader form of the limitation that was added to overcome a prior art rejection in the original prosecution to get a “free pass” from recapture in broadening reissues, without further inquiry. But until there is more

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guidance from the Federal Circuit regarding how the recapture rule may be avoided when a reissue claim is narrower in an aspect germane to prior art rejection, or materially narrowed in other respects, in my view we should not try to draw conclusions from language in other recapture cases. In this difficult and fact-specific area of the law, we cannot draw conclusions from language in cases that fall within the facts of *Clement* 3(a) -- i.e., a limitation added during prosecution, in response to a rejection, is omitted in its entirety in the reissue claims -- and apply those conclusions to cases that fall within the distinct factual situation of *Clement* 3(b).

With rejection of *Eggert* as binding authority, the majority limits the material narrowing “in other respects” to avoid the recapture rule to “overlooked” aspects of the invention as discussed in *Hester Industries Inc. v. Stein, Inc.*, 142 F.3d 1472, 46 USPQ2d 1641 (Fed. Cir. 1998). The majority further points out (part IV.A.(12) *supra*) that the reissue claims that avoided recapture in *Ball Corp.* could be characterized as material narrowing in “overlooked” aspects of the invention, as the reissue claims recited structure that was not claimed during the original prosecution. The Federal Circuit in *Ball Corp.*, however, did not discuss the replacement limitation as being an “overlooked” aspect of the invention. Moreover, the lower court pointed out that the subject matter had never been claimed in the original application as support for the views that the reissue claims were different in scope (i.e., narrower) than the claims canceled from the original application and narrower than the patent claims at least with respect to the added

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limitations. *See Ball Corp. v. United States*, 219 USPQ 73, 78-79 (Cl. Ct. 1982).

In any event, my point of departure from the majority's reasoning with regard to "material narrowing" is the determination that *Eggert* no longer applies. However, it seems unlikely that the other precedents require that a material narrowing "in other respects" to avoid the recapture rule be always limited to "overlooked" aspects of the invention. The reissue statute is "remedial in nature, based on fundamental principles of equity and fairness, and should be construed liberally." *In re Weiler*, 790 F.2d 1576, 1579, 229 USPQ 673, 675 (Fed. Cir. 1986).

#### *What Subject Matter is Surrendered?*

The majority also relies on *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 535 U.S. 722, 122 S. Ct. 1831, 62 USPQ2d 1705 (2002), for definition of "surrendered subject matter." The law of prosecution history estoppel as it relates to limiting the doctrine of equivalents provides useful analogies for determining how prosecution history may apply to recapture of surrendered subject matter in a reissue. However, the *Festo* presumption applies to recapture of equivalents that may be given up during prosecution, rather than to broadening reissue recapture of subject matter that was surrendered. The Supreme Court identified three ways in which the patentee can overcome the presumption of surrender (535 U.S. at 737-41, 122 S. Ct. at 1840-42, 62 USPQ2d at 1712-14, reproduced at part IV.A.(10) *supra*), none of which apply to reissue recapture.

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Moreover, the Federal Circuit has reviewed four reissue recapture cases since *Festo*,<sup>11</sup> and none have cited *Festo* or otherwise indicated that recent developments in the law of the doctrine of equivalents have changed any analysis with respect to reissue recapture. *Kim v. ConAgra Foods, Inc.*, 465 F.3d 1312, 80 USPQ2d 1495 (Fed. Cir. 2006), provides guidance for the determination of “what subject matter is surrendered” in the context of broadening reissue.

In *Kim*, the applicant Kim filed a patent application for a composition and process for controlling the oxidation rate of ascorbic acid in breadmaking. Claims 1 through 5 of the application were directed to a composition including an unspecified amount of ascorbic acid and 0.03-0.2 parts organic acid by weight of flour in the dough. The examiner rejected claims as obvious over Tanaka (U.S. Patent 4,296,133) and two other references. Kim abandoned the original application and filed a continuation-in-part application, with claim 1 including, *inter alia*, a food acid limitation of 0.02-0.15 parts per 100 parts of flour. *Kim* at 1320-21, 80 USPQ2d at 1500.

The examiner rejected the continuation-in-part claims as obvious over Tanaka and other references. Following a telephone conference with Kim,

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<sup>11</sup> *North American Container, Inc. v. Plastipak Packaging, Inc.*, 415 F.3d 1335, 75 USPQ2d 1545 (Fed. Cir. 2005); *Kim v. ConAgra Foods, Inc.*, 465 F.3d 1312, 80 USPQ2d 1495 (Fed. Cir. 2006); *Medtronic, Inc. v. Guidant Corp.*, 465 F.3d 1360, 80 USPQ2d 1558 (Fed. Cir. 2006); *MBO Laboratories, Inc. v. Becton, Dickinson & Company*, 474 F.3d 1323, 81 USPQ2d 1661 (Fed. Cir. 2007).

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the examiner allowed all the claims after amending the application to change the method claims to composition claims and changing the transition phrase from “comprising” to “consisting essentially of.” The examiner allowed the claims as amended, noting that none of the prior art of record taught or suggested, *inter alia*, “a food acid and a phosphate in a specific amount.” *Id.* at 1321, 80 USPQ2d at 1500.

In applying for reissue of the patent, Kim sought to amend the original patent by, *inter alia*, changing the food acid range from 0.02-0.15 parts per 100 parts of flour to 0.015-0.2 parts per 100 parts of flour. *Id.* at 1321, 80 USPQ2d at 1501. In the Federal Circuit’s review of a district court’s judgment that the reissued claims were not invalid, Kim conceded that the reissue claims were not narrower in any other material aspect.<sup>12</sup> The only recapture issue on review was whether the broader aspects of the reissued claims related to “surrendered” subject matter. *Id.* at 1322, 80 USPQ2d at 1501.<sup>13</sup>

The Federal Circuit noted that in determining whether “surrender” of subject matter has occurred, the proper inquiry is whether an objective

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<sup>12</sup> To the extent that the broadened range in the reissue might operate as a “substitute” for the narrower range added during prosecution, the position was not argued or addressed at the Federal Circuit.

<sup>13</sup> The Federal Circuit also reaffirmed the rule that the challenger of a reissued patent must establish surrender of recaptured subject matter by clear and convincing evidence. *See id.* *Cf. Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 344 F.3d 1359, 1366-70, 68 USPQ2d 1321, 1325-28 (Fed. Cir. 2003) (burden of rebutting *Festo* presumption lies with the patentee).

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observer viewing the prosecution history would conclude that the purpose of the patentee's amendment or argument was to overcome prior art and secure the patent. *Id.* at 1323, 80 USPQ2d 1502. If the objective public observer can discern a surrender of subject matter during the prosecution of an original patent in order to overcome prior art and obtain the patent, then the recapture rule should prevent the reissuing of that patent claim to claim the surrendered subject matter. *Id.*

In the appeal to the Federal Circuit, the challenger ConAgra contended, *inter alia*, that during prosecution of the original patent Kim surrendered a lower limit for the food acid range when she changed the range from 0.03-0.2 parts by weight of flour in the dough in her original application to 0.02-0.15 parts per 100 parts of flour in the continuation-in-part application. ConAgra suggested that Kim narrowed the food acid range in order to distinguish the claim from the Tanaka reference. *Id.* at 1325, 80 USPQ2d at 1502-03.

However, this assertion is belied by the prosecution history. As the district court explained, "the range for the food acids used in the pertinent prior art (Tanaka) had been [0].0005 to [0].006. Plaintiff's lower end choice of [0].015 [in the reissue application] or 0.02 [in the original application] are both a significant difference from [0].006. It can not be inferred that plaintiff's choice of [0].020 instead of [0].015 was because plaintiff was surrendering the difference between the two out of fear [0].015 would be found to be obvious while [0].020 would not." Further, "[t]he Patent Examiner did not indicate that [the original application's] range [of 0.03-0.2] was obvious in light of the prior art. Instead, the Patent Examiner indicated that the use of food acid and ascorbic acid in general was disclosed by

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the prior art and that the particular range . . . was indefinite in that it was unclear if it was measured solely in ratio to flour.” We agree with the district court. We therefore affirm the district court’s denial of ConAgra’s motion for JMOL of invalidity based on the recapture rule.

*Kim* at 1324, 80 USPQ2d at 1503 (citations to Joint Appendix omitted).

*Kim* thus demonstrates that the step of determining whether a reissue claim is materially narrowed in other respects to avoid the recapture rule can be obviated. An applicant for reissue may show that the broader aspects of the reissue claim *does not* relate to surrendered subject matter, before reaching the question of material narrowing. The evidence available to the “objective observer” includes the prior art that was applied against the claim. That the applied prior art did not require the precise limitation added in response to a rejection can be a factor in showing that recapture does not apply,<sup>14</sup> when considered with other indicia in the prosecution history tending to show that subject matter was not surrendered.

*Kim* also rebuts the majority’s contention, part IV.A.(6) *supra*, that the subject matter that is surrendered includes, on a limitation-by-limitation basis, the territory falling between the scope of the application claim that was canceled or amended and the patent claim that ultimately issued.

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<sup>14</sup> “[O]ne might err without deceptive intention in adding a particular limitation where a less specific limitation regarding the same feature, or an added limitation relative to another element, would have been sufficient to render the claims patentable over the prior art.” *In re Richman*, 409 F.2d 269, 276, 161 USPQ 359, 363 (CCPA 1969).

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I agree with the majority's reasoning, however, to the extent that during the *ex parte* prosecution of a reissue it should be sufficient, to shift the burden to the applicant to show that recapture does not apply, for an examiner to point out that broader aspects of a reissue claim with respect to the patent claims *prima facie relate* to surrendered subject matter in view of language that is changed or dropped in the reissue. A *prima facie* showing could be made by pointing out that a particular limitation added in response to a rejection during the original prosecution is not recited (in its entirety) in the reissue claim. The applicant's rebuttal could include showing that:

(1) the objective observer would recognize, when considering the prosecution history as a whole, that the broader aspects of the reissue claim do not relate to surrendered subject matter (which would serve the further purpose, in many cases, of demonstrating that the reissue claim is patentable over the prior art that was applied in the original application); or

(2) the reissue claim has been materially narrowed in other respects so as to avoid the recapture rule.

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