IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF FLORIDA
TAMPA DIVISION

JAYCE P. WALTERS	§	
	§	
Plaintiff,	§	
	§	
v.	§	CIVIL ACTION NO. 8:11-cv-00625
	§	
HOOVER & STRONG, INC.	§	
	§	
Defendant.	§	
	§	JURY TRIAL DEMANDED

SECOND AMENDED COMPLAINT

TO THE HONORABLE JUDGE OF SAID COURT:

Plaintiff Jayce P. Walters file this second amended complaint ("Complaint") against Defendant Hoover & Strong, Inc. (the "Defendant").

THE PARTIES

1. Plaintiff Jayce P. Walters ("Walters") is an individual residing in Pinellas County, Florida.

2. Defendant Hoover & Strong, Inc. ("Hoover") is a Virginia corporation having its principal place of business at 10700 Trade Road, Richmond, Virginia 23236. Its registered agent is Hugh M. Fain III, Spotts Fain PC, 411 E. Franklin Street, Suite 600, Richmond, Virginia 23219. Service of process should be made by serving its registered agent Hugh M. Fain III or its President, Torrance D. Hoover at 70 Bellona Arsenal, Midlothian, Virginia 23113.

NATURE OF ACTION AND JURISDICTION

3. This is an action for patent infringement arising under 35 U.S.C. § 271, and the patent laws of the United States, Title 35 U.S.C. § 1, et seq. Jurisdiction in this Court is proper pursuant to 28 U.S.C. §§ 1331 and 1338(a).

VENUE

4. On information and belief, the Defendant has been and is actively doing business in this District.

5. On information and belief, this Court has personal jurisdiction over the Defendant, and venue is proper in this District pursuant to 28 U.S.C. §§ 1391 and 1400(b).

FACTUAL BACKGROUND

6. Jayce P. Walters is an individual residing in Pinellas County, Florida.

7. On August 28, 2001, United States Letters Patent 6,279,436 ("the '436 Patent") were duly and legally issued. A true and correct copy of the '436 Patent is attached to this complaint as Exhibit A. Walters has been the owner of the '436 Patent at all times since its issuance.

8. Recently, Walters became aware of Hoover's marketing and selling (a) settings that are being utilized for setting and securing a gemstone therein by using the method claimed by the '436 Patent, and (b) settings with gemstones therein that were set and secured in the setting by utilizing the method claimed by the '436 Patent. Those activities constitute an infringement upon the '436 Patent. Claims 1 through 4 are being infringed. The following is Claim 1:

> "A method of setting a gemstone having a profile into a metallic base having a setting of substantially uniform thickness, the gemstone profile including at least three distinct surfaces, the method comprising the steps of:
>
> cutting at least one notch into an inner surface of the setting, said at least one notch having at least three notch surfaces, each notch surface being complementary to a corresponding profile surface of the gemstone;
>
> setting the gemstone in the setting so that portions of the gemstone profile surfaces are received in a respective notch;
>
> securing the gemstone within the base by manually deforming the setting such that the notch surfaces of each notch substantially conform to the corresponding profile surfaces of the gemstone."

9. Walters has been damaged by the Defendant's infringement of the '436 Patent.

10. The Defendant's infringement of the '436 Patent will continue, unless enjoined by this Court.

COUNT ONE

(Infringement of United States Letters Patent No. 6,279,436)

11. Walters incorporates by reference all previous allegations in paragraphs 1 through 10 of this Complaint as if specifically set forth herein.

12. The Defendant has infringed and continues to infringe the '436 Patent under 35 U.S.C. 271(a) by using the method claimed by the '436 Patent in the United States of America. The method is being used to make several products that are made, offered for sale or sold by Defendant. The products include the gemstone (the "Final Product"). The products that are made by using the infringing method are listed in Exhibit B by making reference to the product number and the page number of the Hoover & Strong 2011-2013 Products & Services catalogue. In order to make the Final Product all the steps of the method of Claim 1 of the '436 Patent are used and there is no alternative method or manner of making the Final Product. Furthermore, after Defendant became aware of this lawsuit, it continued to use the subject method to make the Final Product.

13. The Defendant has actively induced and continues to actively induce the infringement of the '436 Patent and is liable as an infringer under 35 U.S.C. 271(b) by selling or offering to sell settings that are being utilized by jewelers for setting and securing a gemstone therein by using the method claimed by the '436 Patent to make a product like the Final Product. The settings are also shown in Exhibit B. Those settings can only be used to set gemstones in the settings by using the method claimed by the '436 Patent. In order to set the gemstone in the setting all the steps of the method of the '436 Patent are used and there is no alternative method of doing that. The pictures of

the Final Product in the 2011 Hoovers & Strong Catalogue clearly show that the settings can only be used in the utilization of the infringing method to set the stone in the setting. On information and belief, Defendant knew that those settings would be used to set a stone in the setting by using all the steps of the method claimed by the '436 Patent. Furthermore, on information and belief, the Defendant knew that the use of those steps constitutes an infringement of the '436 Patent. Furthermore, after the Defendant became aware of this lawsuit, it continued to offer for sale and to sell the subject settings which can only be used in the utilization of the infringing method to set the gemstones in the setting.

14. The Defendant has offered to sell or sells settings that are being utilized by jewelers for setting and securing a gemstone therein by using the method claimed by the '436 Patent and, therefore, is liable as a contributory infringer under 35 U.S.C. 271(c). The settings are also shown in Exhibit B. Those settings can only be used to set gemstones in the settings by using the method claimed by the '436 Patent. In order to set the gemstone in the setting all the steps of the method of the '436 Patent are used and there is no alternative method of doing that. There are no other uses of the settings. The pictures of the Final Products in the 2011 Hoovers & Strong Catalogue clearly show that the settings can only be used in the utilization of the infringing method to set the stone in the setting and nothing else. As demonstrated by the pictures, Defendant knew that those settings would be used to set a stone in the setting by using all the steps of the method recited by Claim 1 of the '436 Patent. Furthermore, on information and belief, Defendant knew that the use of those steps constitutes an infringement of the '436 Patent. Furthermore, after Defendant became aware of this lawsuit, it continued to offer for sale and to sell the subject settings which can only be used in the utilization of the infringing method to set the gemstone in the setting.

15. The Defendant has offered to sell or sells settings with gemstones therein that were

set and secured in the setting by utilizing the method claimed by the ‘436 Patent and, therefore, is liable for infringement under 35 U.S.C. 271(g). Those products are listed in Exhibit B. Furthermore, after the Defendant became aware of this lawsuit, it continued to sell settings with gemstones therein that were set and secured in the setting by utilizing the method claimed by the ‘436 Patent.

16. As a direct and proximate result of the Defendant’s acts of patent infringement, Walters has been and continues to be injured and has sustained and will continue to sustain damages in an amount to be proven at trial.

17. Walters has no adequate remedy at law against the acts of patent infringement of the Defendant. Unless the Defendant is permanently enjoined from its unlawful infringement of the '436 Patent, Walters will suffer irreparable harm.

JURY DEMAND

18. Walters demands a trial by jury on all issues so triable.

PRAYER FOR RELIEF

WHEREFORE, Walters demands judgment against the Defendant, as follows:

A. For an Order temporarily and permanently enjoining Hoover & Strong, Inc. and other persons, firms or corporations acting in concert or participation with them, from:

1. designing, manufacturing, producing, offering for sale and selling (a) settings that are being utilized for setting and securing a gemstone therein by using the method claimed by the ‘436 Patent, and (b) settings with gemstones therein that were set and secured in the setting by utilizing the method claimed by the ‘436 Patent; and/or

2. using the method claimed by the ‘436 Patent.

B. For an Order that Walters recover his damages sustained as a result of the infringement of United States Letters Patent No. 6,279,436 by Hoover & Strong, Inc. pursuant to

35 U.S.C. § 284.

C. For an Order that Walters recover his reasonable costs, expenses and attorneys' fees pursuant to 35 U.S.C. § 285.

D. For a judgment in favor of Walters against Hoover & Strong, Inc. for the relief stated above;

E. For post-judgment interest on the foregoing sums at the maximum rate permitted by law from the date judgment is entered until paid.

F. For such other and further general and equitable relief as this Court deems just and proper in the circumstances and Walters may be entitled.

Date: September 19, 2011

Respectfully submitted,

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CERTIFICATE OF SERVICE

This is to certify that a true and correct copy of the foregoing document was filed electronically in compliance with the local rules on September 19, 2011. As such, the notice of electronic filing that is automatically generated by the Court's electronic filing system constitutes service of the document on those registered as filing users of the system. There are no other counsel of record not registered as filing user of the system. Served on this the 19th day of September, 2011

/s/ Anastassios Triantaphyllis
Anastassios Triantaphyllis

EXHIBIT A

US006279436B1

(12) **United States Patent**
Walters

(10) **Patent No.: US 6,279,436 B1**
(45) **Date of Patent: Aug. 28, 2001**

(54) **METHOD FOR CUTTING A SEAT IN THE SETTING OF STONES IN JEWELRY**

(76) Inventor: **Jayce P. Walters**, 955 51st St. North, Apt. 209, St. Petersburg, FL (US) 33710

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/648,707**

(22) Filed: **Aug. 25, 2000**

Related U.S. Application Data

(62) Division of application No. 09/212,226, filed on Dec. 16, 1998, now Pat. No. 6,149,354.

(51) **Int. Cl.**[7] **B23B 1/00**
(52) **U.S. Cl.** **82/1.11**; 82/47; 63/10; 63/26
(58) **Field of Search** 407/15, 16, 18, 407/12, 30, 31, 42, 51, 53, 54, 56, 57; 409/139, 140, 297; 82/1.11, 47; 29/10; 63/26

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Primary Examiner—Henry Tsai
(74) *Attorney, Agent, or Firm*—Senniger, Powers, Leavitt & Roedel

(57) **ABSTRACT**

A method of setting a gemstone having a profile including at least three notch surfaces in a jewelry setting includes the step of cutting notches into the inner surface of each setting prong. Each notch has as least three notch surfaces, each surface being complementary to a corresponding profile surface of the gemstone. The gemstone is set in the setting prongs so that portions of the gemstone profile surfaces are received in respective notches. The gemstone is secured within the setting by manually deforming the setting prongs such that the notch surfaces of each notch substantially conform to the corresponding profile surfaces of the gemstone.

4 Claims, 5 Drawing Sheets

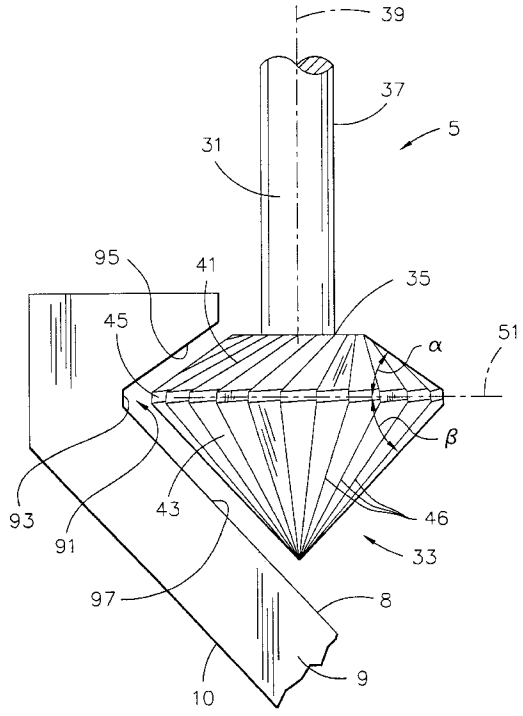


FIG. 1A
PRIOR ART

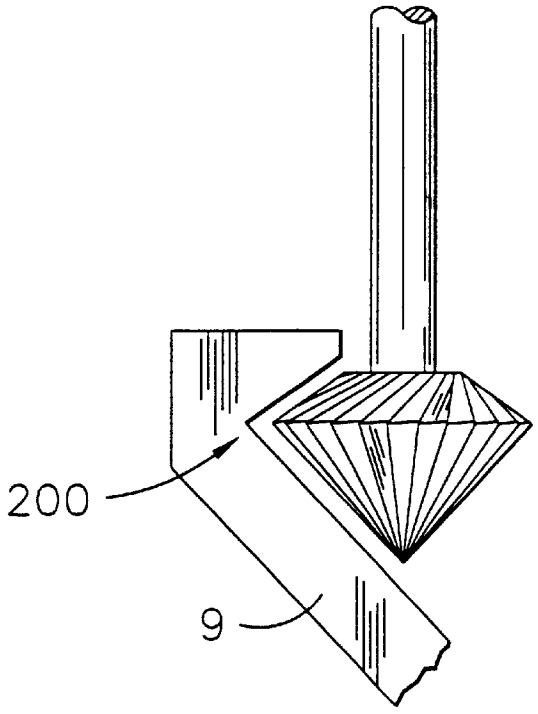


FIG. 1B
PRIOR ART

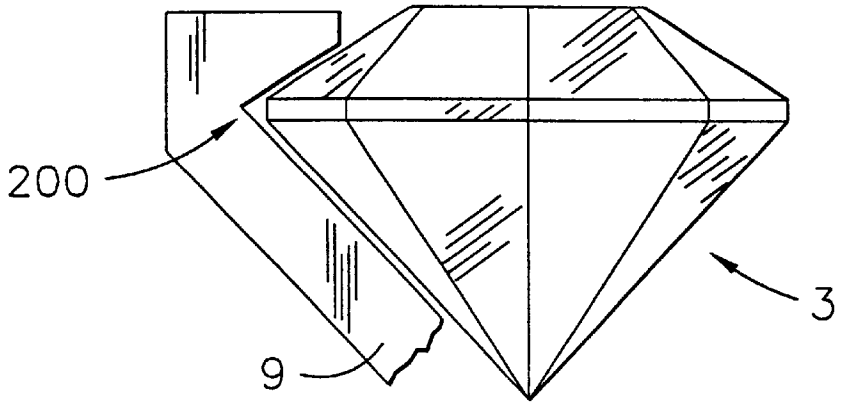


FIG. 1C
PRIOR ART

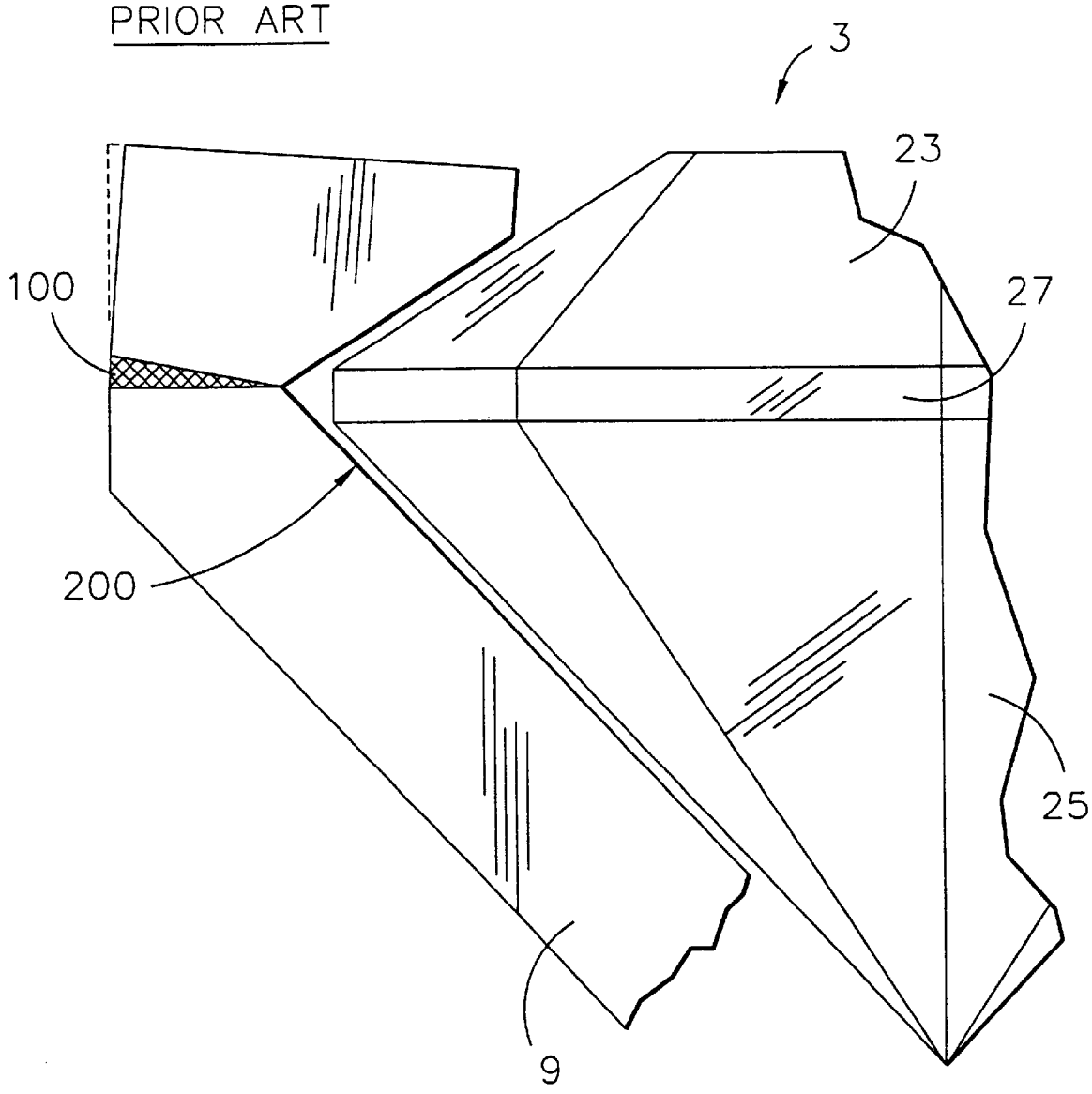


FIG. 2

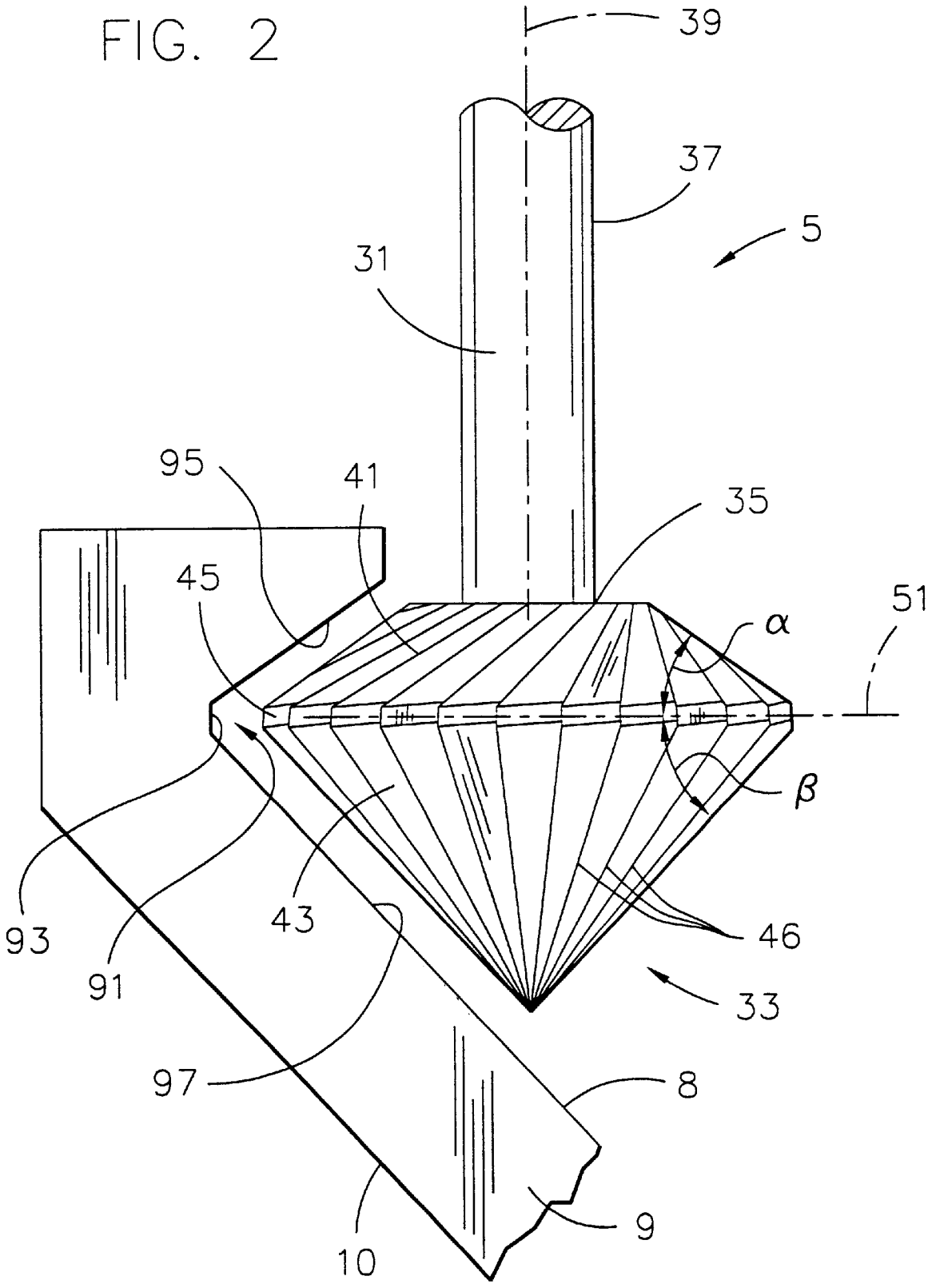


FIG. 3

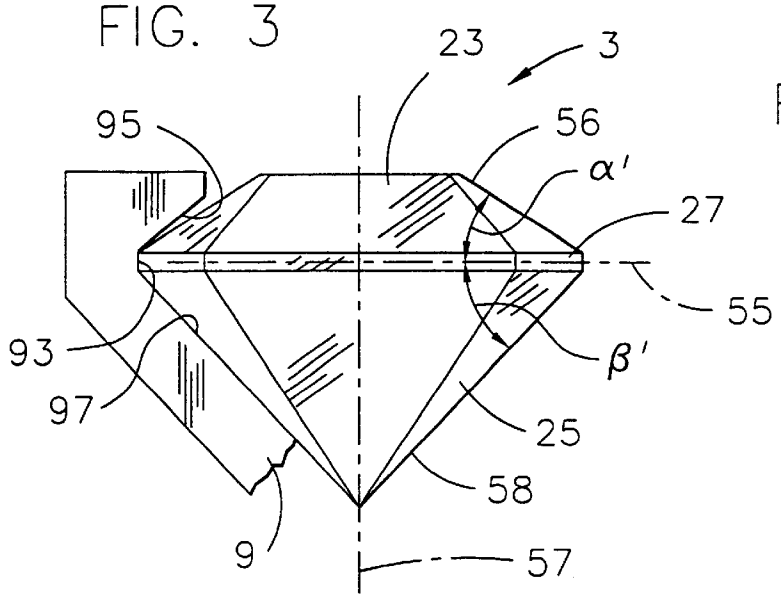


FIG. 4

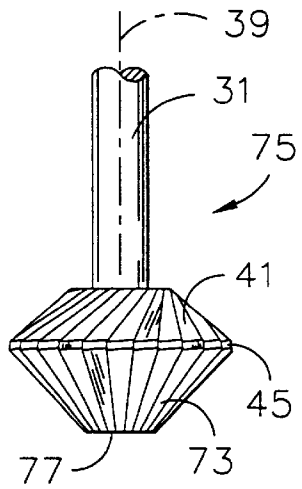


FIG. 5

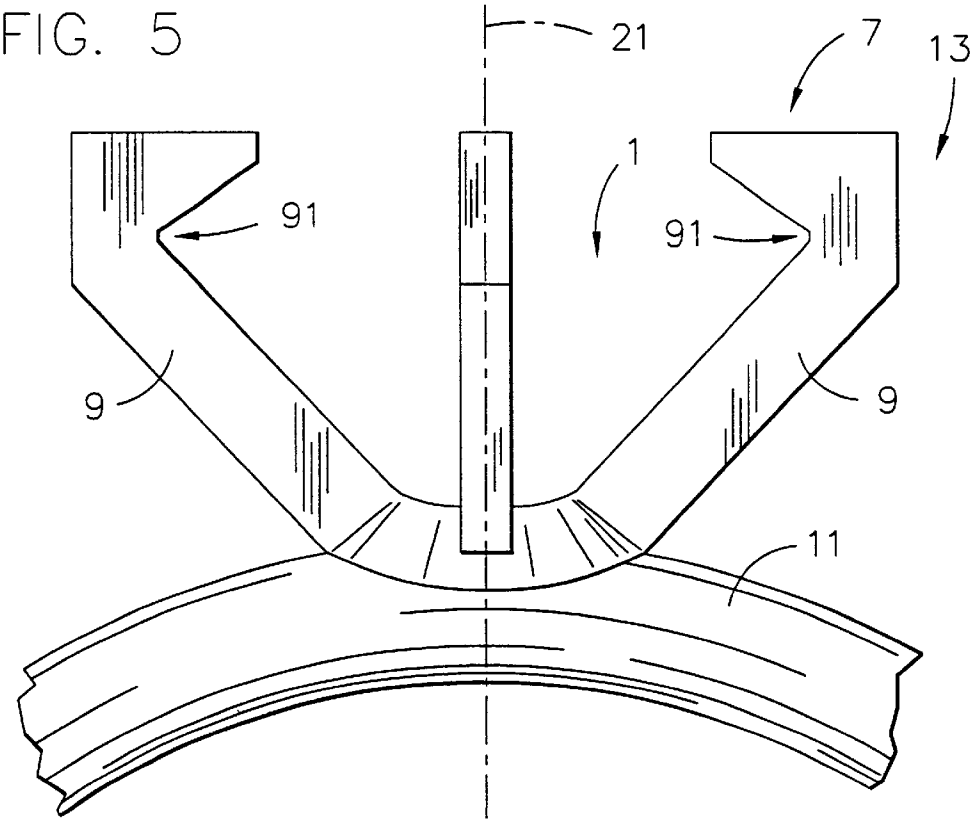
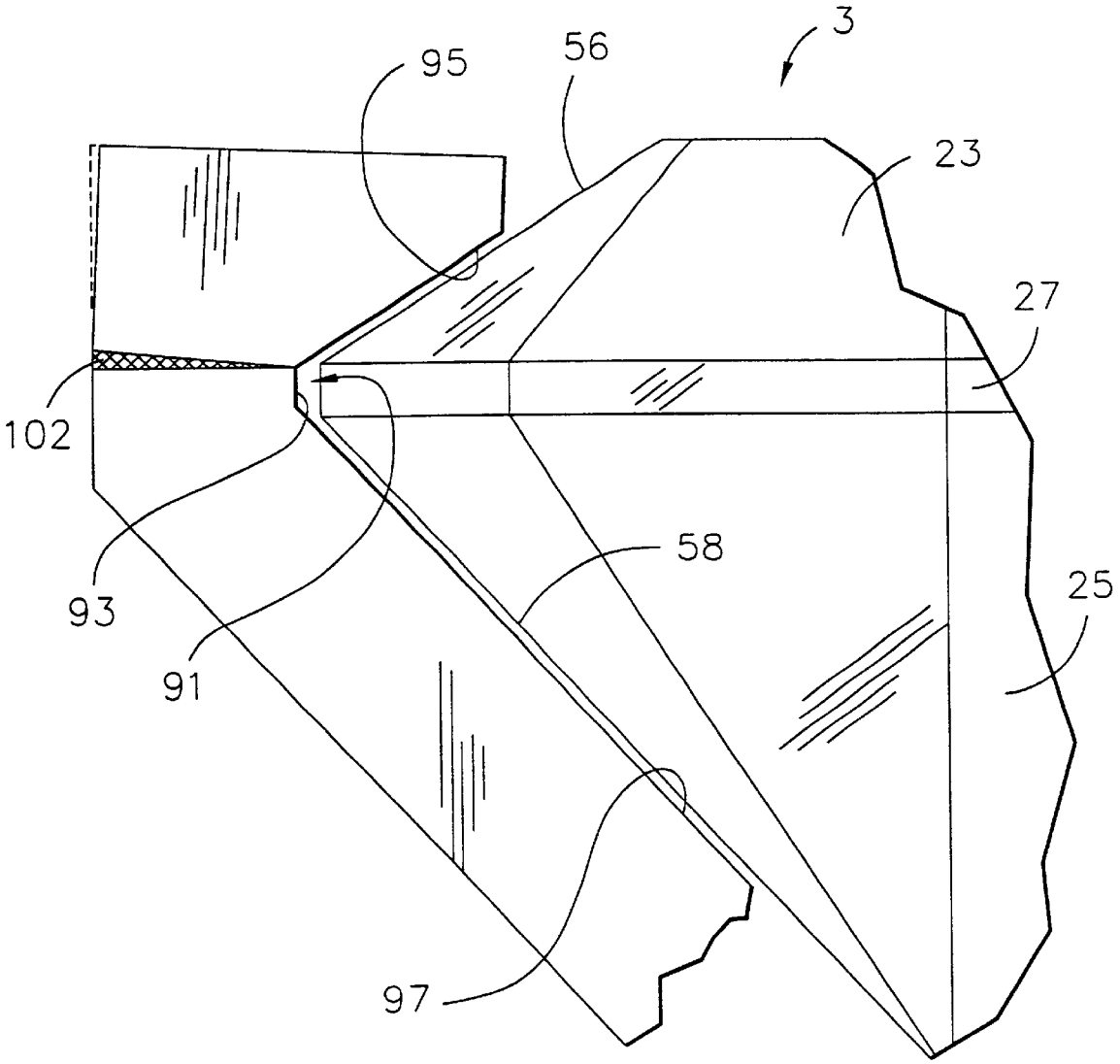


FIG. 3A



METHOD FOR CUTTING A SEAT IN THE SETTING OF STONES IN JEWELRY

CROSS REFERENCE TO RELATED APPLICATION

This application is a divisional of U.S. patent application Ser. No. 09/212,226, filed Dec. 16, 1998, which issued as U.S. Pat. No. 6,149,354 on Nov. 21, 2000.

BACKGROUND OF THE INVENTION

The present invention relates generally to a tool and method for creating a seat in jewelry for receiving a gemstone, and more particularly to such a tool shaped to more precisely form the seat to the gemstone.

Gemstones are set using a cutting tool to form a seat in a setting of the jewelry. The gemstone is positioned in the seat and the setting is deformed around the gemstone to secure it therein. Though successful, the methods and tools utilized in the prior art do not fully address structural considerations, alloy strengths, or stress-related fatigue with regard to the settings used to secure the gemstones. As a result, when settings are prepared using the methods and tools of the prior art, a substantial risk of weakening the structural integrity of the setting exists. Additionally, there is a significant risk that as the setting is being manually deformed, the crown and girdle of the gemstone could be damaged.

Typically, in the methods of the prior art, as illustrated in FIG. **1**A, a notch **200** having two surfaces is cut into a setting, such as a prong-type setting having prongs **9**, and a gemstone **3** is set into the notch, as shown in FIG. **1**B. The gemstone has a crown, a pavilion, and a girdle between the crown and pavilion. As illustrated in FIG. **1**B, the notch **200** must be cut deep enough to accommodate the girdle of the gemstone. When the girdle is positioned against the inner face of the setting, a gap is present between the crown of the gemstone being set and the setting in the notch. Once the gemstone is positioned, the setting is manually deformed and pressed against the crown of the gemstone, thus closing the gap and securing the gemstone within the setting. Referring to FIG. **1**B, it may be seen that the notch **200** is V-shaped, but that the profile of the gemstone is polygonal. In order to receive the gemstone in the notch without a substantial gap between the inner surface of the notch and the girdle, the angle of the notch is substantially greater than the angle between the crown and pavilion of the gemstone. Thus, when the setting is bent to secure the gemstone in the notch, substantial plastic deformation of the setting occurs, as illustrated by the cross-hatched, triangular area **100** in FIG. **1**C. A bending movement causes the inner face of the setting to be compressed, while the outer edge of the setting is elongated. These weakened setting areas are subject to chemical attack and reduced structural strength along grain boundaries.

Additionally, the present setting methods increase the potential of damage to the gemstone being set. Using the methods of the prior art, a setting prepared and manually deformed to secure the gemstone in place pinches the gemstone obliquely from above and below, but not uniformly on all sides of the gemstone being set. A gap, as shown in FIGS. **1**B and **1**C is created between the girdle of the gemstone and the setting. When the setting is manually deformed to secure the gemstone, the pressure applied to the gemstone on both sides of the gap can weaken the stone and cause this area of the gemstone to break, especially if the grain of the crystalline structure is aligned with the setting at a cleavage point of the stone.

SUMMARY OF THE INVENTION

Among the several objects and features of the present invention may be noted the provision of a tool and method for cutting a seat in a setting which more accurately forms the seat to conform to the profile of the gemstone; the provision of such a tool and method which reduce fatigue in the setting process when the gemstone is secured; and the provision of such a tool and method which lessen the opportunity to damage the gemstone.

Generally, a tool of the present invention comprises a cylindrical shank portion having a smooth outer surface and a bur cutting portion attached at one end. The bur cutting portion has cutting surfaces disposed for rotation about a longitudinal axis of the shank portion and includes three cutting surfaces. The first and second cutting surfaces are generally conical and the third, located between the two conical cutting surfaces, is generally cylindrical in shape. When employed, the tool cuts three distinct faces into the setting prongs to form the seat for the gemstone.

In another aspect of the present invention, a method of setting a gemstone having a profile including at least three notch surfaces in a metallic base generally comprises the step of cutting notches into the inner surface of each setting prong. Each notch has as least three notch surfaces, each surface being complementary to a corresponding profile surface of the gemstone. The gemstone is set in the setting prongs so that portions of the gemstone profile surfaces are received in respective notches. The gemstone is secured within the base by manually deforming the setting prongs such that the notch surfaces of each notch substantially conform to the corresponding profile surfaces of the gemstone.

Other objects and features will be in part apparent and in part pointed out hereinafter.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1**A is an elevational view of a tool of the prior art cutting a seat in a jewelry setting;

FIG. **1**B is an elevational view of a gemstone set in the setting after the tool of the prior art has completed shaping the setting;

FIG. **1**C is an enlarged fragmentary perspective showing a gemstone set in the setting of FIG. **1**A;

FIG. **2** is an elevational view showing the preferred embodiment of the tool of the present invention cutting a seat in a setting;

FIG. **3** is an elevational view showing a gemstone set in the setting of FIG. **2** after the seat is cut;

FIG. **3**A is an enlarged fragmentary perspective showing a gemstone set in the setting of FIG. **2**;

FIG. **4** is an elevational view showing a second embodiment of the tool of FIG. **2**; and

FIG. **5** shows a fragmentary elevational view of a ring having a setting formed with a seat according to the present invention.

Corresponding reference characters indicate corresponding parts throughout the drawings.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now to the drawings and in particular to FIG. **2**, a tool for cutting a seat **1** in a setting **7** of jewelry, such as a ring **13** (FIG. **5**) is generally indicated at **5**. For purposes of describing the present invention, the setting **7** of the

illustrated embodiments herein is a prong-type setting having multiple prongs **9** spaced around the location where a gemstone **3** will be received. For simplicity, only one setting prong **9** has been illustrated in FIGS. **2**, **3**, and **3A**. It is understood, however, that bezel-type settings, bead type settings and other commonly used jewelry settings may be used instead of the prong-type setting and remain within the scope of this invention.

The setting prongs **9** are integrally attached to a base **11** of the ring **13** each equidistantly spaced relative to an axis of symmetry **21** extending generally through the center of the base. The gemstone **3**, as shown in FIG. **3**, has an upper crown section **23**, a lower pavilion section **25**, and a girdle section **27** intermediate the crown and pavilion sections. The tool **5**, as shown in FIG. **2**, comprises a rotatable cylindrical shank portion **31** and a bur cutting portion, generally indicated at **33**, mounted on an end **35** of the shank portion. The shank portion **31** has a smooth outer surface **37** and is constructed for attachment to a rotary tool (not shown), such as jeweler's lathe, for rotation of the shank portion and bur cutting portion **33** about a longitudinal axis **39** of the shank portion.

The bur cutting portion **33** is constructed in one piece, but for purposes of the description will be described as having three individual cutting surfaces **41,43,45**. The bur cutting portion **33** comprises a first generally conical cutting surface **41**, a second generally conical cutting surface **43**, and a generally cylindrical cutting surface **45** disposed between the first conical cutting surface and the second conical cutting surface. The cutting surfaces **41,43,45** are disposed for rotation and are generally symmetrical about the longitudinal axis **39** of the cylindrical shank portion **31**. The first conical cutting surface **41** and the second conical cutting surface **43** are shaped so that their bases are adjacent to the generally cylindrical cutting surface **45**.

The first generally conical cutting surface **41** extends from its base to the cylindrical shank portion **31** in the form of a frustum. This cutting surface **41** is disposed at an oblique angle α in relation to a reference plane **51** extending perpendicular to the longitudinal axis **39** of the shank portion **31**. In the preferred embodiment of the tool **5**, the oblique angle α is equal to or greater than a corresponding angle α' formed between a reference plane **55** extending perpendicular to a longitudinal axis **57** of the gemstone **3**, and an outer surface **56** of the crown section **23** of the gemstone **3** being set (FIG. **3**). For example, when setting diamonds using the preferred embodiment, the oblique angle α relating to the cutting surface **41** of the tool **5** is preferably 5–10° greater than its corresponding angle α' of the gemstone **3**.

In the preferred embodiment, the second generally conical cutting surface **43** extends from its base to form an apex. This cutting surface **43** is disposed at an oblique angle β in relation to a reference plane **51** extending perpendicular to the longitudinal axis **39** of the shank portion **31**. In the preferred embodiment of the tool **5**, the oblique angle β is equal to or greater than a corresponding angle β' formed between a reference plane **55** perpendicular to the longitudinal axis **57** of the gemstone **3** and an outer surface **58** of the pavilion section **25** of the gemstone being set. For example, when setting diamonds using the preferred embodiment, the oblique angle β relating to the cutting surface **43** of the tool **5** is preferably 5–10° greater than its corresponding angle β' of the gemstone **3**. The second generally conical cutting surface **43** is designed to cut an accurate seat **1** in the setting prongs **9** of the jewelry **7**. Additionally, this design minimizes the amount of metal that must be removed from the setting prong **9**.

The cutting surfaces **41, 43, 45** are illustrated herein as having a flat or linear profile. However, it is contemplated that the cutting surfaces **41, 43 45** may be other than linear, such as convex, concave or other suitable profile, without departing from the scope of this invention.

FIG. **4** shows a second embodiment of a tool (indicated generally at **75**) of the present invention having a truncated second cutting surface **73**. The second cutting surface **73** is preferably in the form of a frustum having a smooth bottom face **77**. This embodiment provides less interference when cutting seats **1** on a basket-type setting. A basket-type setting is used with gemstones (not shown) having a shallow profile in which the cross-sectional diameter of the girdle is greater in length than the distance measured between the crown and the apex of the pavilion of the gemstone. In that event, it will be understood that the "longitudinal axis" as used herein extends from the crown to the pavilion and not diametrically. Such gemstones require a setting in which the notch surface corresponding to the girdle be positioned closer to the base of the prong. This embodiment enables such a seat to be accurately cut.

It is also contemplated that the bottom face **77** of the truncated second cutting surface **73** could be shaped to define a fourth cutting surface (not shown) without departing from the scope of this invention.

The cylindrical cutting surface **45**, as seen in FIG. **2**, is integrally disposed between the bases of the first and second generally conical cutting surfaces **41,43**. The cylindrical cutting portion **45** is disposed generally parallel to the longitudinal axis **39** of the shank portion **31**. In the preferred embodiment, the first and second conical surfaces **41,43** and the cylindrical cutting surface **45** are positioned co-axially with the longitudinal axis **39** of the shank portion **31**.

The cutting surfaces **41,43,45** have a plurality of closely arranged sharpened cutting teeth **46** formed therein. Each of the cutting teeth **46** is obliquely disposed at a lateral inclination with respect to the longitudinal axis **39** of the cylindrical shank portion **31**. The cutting teeth **46** extend from the top of the first generally conical cutting surface **41** over the cylindrical cutting portion **45** to the apex of the second generally conical cutting surface **43**.

Prior to using the tool of the present invention, the setting prongs **9** have substantially uniform thickness along their lengths and are generally smooth on their inner surfaces **8** and outer surfaces **10**. In use, the bur cutting portion **33** is positioned to allow the cutting teeth **46** to engage a setting prong **9** whereby moving the rotating tool **5** in a direction generally parallel to a reference line **51** extending perpendicular to the longitudinal axis **39** of the shank portion **31** to contact the inner surface **8** of a setting prong **9**. This contact causes material to be removed from the setting prong **9** to form a notch **91** in the inner face **8** of the setting prong. The tool **5** cuts a notch **91** having three distinct surfaces **93,95,97** into the inner surface **8** of each setting prong **9**. It is to be understood that the tool **5** may be formed to cut additional surfaces without departing from the scope of the present invention.

The notch surfaces **93,95,97** include a first surface **93** generally parallel to the axis of symmetry **21** of the setting prongs **9** of the jewelry **7**, and second and third surfaces **95,97** generally oblique to the same axis of symmetry. The first surface **93** of the notch **91** is positioned between the two oblique surfaces **95,97** of the notch. The second surface **97** of the notch **91** is located below the first surface **93** of the notch and is closest to the base **11** of the ring **13**. The third surface **95** of the notch **91** is located above the first surface

93 of the notch as seen in FIG. 3A. Each notch surface 93,95,97 is complimentary to a corresponding profile surface 23,25,27 of the gemstone 3 being set.

The method is repeated on the remaining setting prongs 9 to form the seat 1 for the gemstone 3. The tool 5 is employed to cut notches 91 in all of the setting prongs 9 such that corresponding profile surfaces 93,95,97 in the notches are equidistantly spaced relative to an axis of symmetry 21 of the setting prongs extending generally through a center of a base 11 of the jewelry 7, as shown in FIG. 5.

As seen in FIG. 3, the gemstone 3 is set in the base 11 of the jewelry 7 so that portions of the gemstone profile surfaces 23,25,27 are received generally against their respective notches 91, i.e., the pavilion 25 of the gemstone is received against the second surface 97 of the notch, the girdle 27 is received against the first surface 93 of the notch and the crown 23 is received against the third surface 95 of the notch. The gemstone 3 is secured within the base 11 of the jewelry 7 by manually deforming the setting prongs 9 such that the profile surfaces of the notch 93,95,97 substantially conform to the corresponding profile surfaces 23,25,27 of the gemstone. Typically, there will initially be some space between the crown 23 and the first surface 93 of each notch 91 to permit deformation of the prong 9 against the gemstone 3. The tool 5 and method of the present invention cut a more accurate shape into the setting prongs 9, thus minimizing the amount of metal that must be removed to form the gemstone seat 1. Because the notch 91 is shaped in close correspondence to the profile of the gemstone 3, the bending movement of the setting prong 9 is minimized during its manual deformation. The amount of bending is illustrated in FIGS. 1C and 3A in the upper left hand corner of the prongs 9 by showing the undeformed position of the corner of the prong in phantom lines. An area of grain boundary compression and elongation, indicated by the cross-hatched triangular area 102 in FIG. 3A, in the setting prong 9 is less than a corresponding area 100 which occurs in prongs cut by tools of the prior art (FIG. 1C). As a result, there is less deformation of the setting 7 and less potential of weakening the setting to the extent that repair is needed.

It will be observed from the foregoing that the tool and method described herein satisfy the various objectives of the present invention and attain other advantageous results. Providing the cylindrical cutting surface 45 between the generally conical cutting surfaces 41,43 shapes the notch 91 closely to the shape of the profile of the gemstone. The amount of material removed from the setting 7 is less because the notch 91 does not have to be as deep or as wide as in the prior art. By leaving material in, the setting 7 is stronger and better able to handle deformation in securing the gemstone 3 and subsequent daily wear and tear. The notch 91 created by the tool 5 reduces the pinching of the gemstone 3 by the setting 7 when they are manually deformed. The closer correspondence of the notch 91 to the profile of the gemstone 3 also reduces the area 102 of stress created in the setting 7, thus helping to maintain the alloy integrity of the setting prongs.

As various changes could be made in the above constructions without departing from the scope of the invention, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

What is claimed is:

1. A method of setting a gemstone having a profile into a metallic base having a setting of substantially uniform thickness, the gemstone profile including at least three distinct surfaces, the method comprising the steps of:

cutting at least one notch into an inner surface of the setting, said at least one notch having at least three notch surfaces, each notch surface being complementary to a corresponding profile surface of the gemstone;

setting the gemstone in the setting so that portions of the gemstone profile surfaces are received in a respective notch;

securing the gemstone within the base by manually deforming the setting such that the notch surfaces of each notch substantially conform to the corresponding profile surfaces of the gemstone.

2. A method as set forth in claim 1 wherein the surfaces of each notch include a first surface generally parallel to the axis of symmetry, and second and third surfaces which are generally oblique to the axis of symmetry.

3. A method as set forth in claim 1 wherein said the first surface of each notch is positioned between the second and third surfaces.

4. A method of setting a gemstone having a profile into a metallic base having a setting of substantially uniform thickness, the gemstone profile including at least three distinct surfaces, the method comprising the steps of:

cutting at least one notch into an inner surface of the setting, said at least one notch having at least three notch surfaces and a pair of corners respectively formed by adjacent notch surfaces, each notch surface being complementary to a corresponding profile surface of the gemstone;

setting the gemstone in the setting so that portions of the gemstone profile surfaces are received in a respective notch;

securing the gemstone within the base by manually deforming the setting generally along at least one of said comers such that the notch surfaces of each notch substantially conform to the corresponding profile surfaces of the gemstone.

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EXHIBIT B

Hoover & Strong
Catalog 2011-2013 Products & Services
TRUSEAT SETTINGS, EARRINGS, PENDANTS & SOLITAIRES

Style	Page	Metals Available In	# of Sizes	Totals
		TRUSEAT SETTINGS		
ST41	69	14KW	18	18
ST48	70	14KW	8	8
ST411	72	14KW	6	6
ST412	72	14KW	6	6
BST42	73	14KW	15	15
PT42	75	14KW	12	12
ST61	84	14KW	18	18
BST61	87	14KW	12	12
PT62	90	14KW	12	12
BZR9	93	14KW/14KY/18KYR/PLATINUM/SS	23	115
SPRT42	97	14KW	10	10
SPRT41	98	14KW	9	9
BSPRT43	100	14KW	12	12
PPRT41	100	14KW/PLATINUM/PALLADIUM	8	24
PPRT42	103	14KW	11	11
BZSQ6	105	14KW/14KY	11	22
BSHTV3	119	14KW	9	9
		TRUSEAT EARRINGS		
ET48S/EN16	275	14KW/14KY	16	32
ET45	275	14KW/14KY	16	32
ET42	276	14KW/14KY/PLATINUM	14	42
ET33	277	14KW/14KY	11	22
EPRT47	279	14KW/14KY	7	14
EPRT43	279	14KW/14KY	12	24
EPRT43S/EN9	280	14KW/PLATINUM/14KY	12	36
EMTV4	281	14KW/14KY	10	20
EPTV3	282	14KW/14KY	10	20
EOT42	282	14KW/14KY	9	18
EET44	282	14KW/14KY	7	14

ET41/LB4	283	14KW/14KY	9	18
Style	Page	Metals Available In	# of Sizes	Totals
ET45/LB4	283	14KW/14KY	7	14
EPRT43/LB4	283	14KW/14KY	7	14
		TRUSEAT PENDANTS		
PNT42	286	14KW/14KY/PALLADIUM	13	39
PNPRT43	287	14KW/14KY/PLATINUM	12	36
PNMTV4	288	14KW/14KY	9	18
PNPTV3	288	14KW/14KY	10	20
PNOT42	288	14KW/14KY	9	18
		TRUSEAT SOLITAIRES		
SHPC5	147	Assembled with TRUSEAT Settings		
SHPC2	148	Assembled with TRUSEAT Settings		
SHPC3	148	Assembled with TRUSEAT Settings		
SHPCZ14	149	Assembled with TRUSEAT Settings		
SHPC4	149	Assembled with TRUSEAT Settings		
SHPC74	150	Assembled with TRUSEAT Settings		
SHPC13	150	Assembled with TRUSEAT Settings		
SHPCZ23	151	Assembled with TRUSEAT Settings		
SHPCZ23A	151	Assembled with TRUSEAT Settings		
SHPC57	152	Assembled with TRUSEAT Settings		
SHPC18A	152	Assembled with TRUSEAT Settings		
SHP06	153	Assembled with TRUSEAT Settings		
SHPL52	153	Assembled with TRUSEAT Settings		
SHP77	154	Assembled with TRUSEAT Settings		
SH78	154	Assembled with TRUSEAT Settings		
SH79	154	Assembled with TRUSEAT Settings		
SHPB10	170	Assembled with TRUSEAT Settings		
SHPRS01	170	Assembled with TRUSEAT Settings		
SHPS02	171	Assembled with TRUSEAT Settings		
SHPR117	172	Assembled with TRUSEAT Settings		
SHPR117	172	Assembled with TRUSEAT Settings		
SHPR10	173	Assembled with TRUSEAT Settings		
SHPR67	173	Assembled with TRUSEAT Settings		
SHPC16	174	Assembled with TRUSEAT Settings		
SHPC17	174	Assembled with TRUSEAT Settings		
SHPC58	175	Assembled with TRUSEAT Settings		
SHPC6	175	Assembled with TRUSEAT Settings		

SHPC7	176	Assembled with TRUSEAT Settings		
SHPC9	176	Assembled with TRUSEAT Settings		
SHPR221	177	Assembled with TRUSEAT Settings		
SHPP02	177	Assembled with TRUSEAT Settings		
SHPR33	178	Assembled with TRUSEAT Settings		
SHPR35	178	Assembled with TRUSEAT Settings		
SHPR47	179	Assembled with TRUSEAT Settings		
SHPS04	179	Assembled with TRUSEAT Settings		
SHPR412	181	Assembled with TRUSEAT Settings		
SHPR174	182	Assembled with TRUSEAT Settings		
SHPR176	182	Assembled with TRUSEAT Settings		
SHPR73A	188	Assembled with TRUSEAT Settings		
SHPR273A	189	Assembled with TRUSEAT Settings		
SHPR111A	190	Assembled with TRUSEAT Settings		
SHPR26A	191	Assembled with TRUSEAT Settings		
SHPS221S	192	Assembled with TRUSEAT Settings		
SHPC56	193	Assembled with TRUSEAT Settings		
SHPR151	194	Assembled with TRUSEAT Settings		
SHPC55	195	Assembled with TRUSEAT Settings		
SHP25	197	Assembled with TRUSEAT Settings		
SHPR402	198	Assembled with TRUSEAT Settings		
SHPR85	199	Assembled with TRUSEAT Settings		
EGRR38	201	Assembled with TRUSEAT Settings		
SHPR159	202	Assembled with TRUSEAT Settings		
SHP159	203	Assembled with TRUSEAT Settings		
SHPR148	204	Assembled with TRUSEAT Settings		
SHPR191	205	Assembled with TRUSEAT Settings		
SHPR147	206	Assembled with TRUSEAT Settings		
SHPR153	207	Assembled with TRUSEAT Settings		
SHPR150	208	Assembled with TRUSEAT Settings		
SHPR158	209	Assembled with TRUSEAT Settings		
SHPR146	210	Assembled with TRUSEAT Settings		
SHPR152	211	Assembled with TRUSEAT Settings		
SHPR157	212	Assembled with TRUSEAT Settings		
SHPR156	213	Assembled with TRUSEAT Settings		
SHPR145	214	Assembled with TRUSEAT Settings		
SHPR212	215	Assembled with TRUSEAT Settings		
SHPR62	216	Assembled with TRUSEAT Settings		
SHPR211	217	Assembled with TRUSEAT Settings		
SHPS213	218	Assembled with TRUSEAT Settings		
SHPR213	220	Assembled with TRUSEAT Settings		
SHPS221	221	Assembled with TRUSEAT Settings		

SHPR218	222	Assembled with TRUSEAT Settings		
SHPR171	223	Assembled with TRUSEAT Settings		
SHPR77	224	Assembled with TRUSEAT Settings		
SHPB63	225	Assembled with TRUSEAT Settings		
SHPB69	226	Assembled with TRUSEAT Settings		
SHP21	227	Assembled with TRUSEAT Settings		
SHPR412	230	Assembled with TRUSEAT Settings		