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**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF CALIFORNIA****TIMOTHY BARRETT,
Individually and On Behalf of All
Others Similarly Situated,****Plaintiff,****v.****MILWAUKEE ELECTRIC TOOL,
INC., d/b/a STILETTO TOOLS,
INC.****Defendant.****Case No.: '14CV1804 JAH DHB****CLASS ACTION****COMPLAINT FOR DAMAGES,
INJUNCTIVE RELIEF, AND
RESTITUTION FOR VIOLATIONS
OF CALIFORNIA'S BUS. & PROF.
CODE §§ 17200 ET SEQ.; BUS. &
PROF. CODE §§ 17500 ET SEQ.;
NEGLIGENT AND INTENTIONAL
MISREPRESENTATION.****JURY TRIAL DEMANDED**

INTRODUCTION

1. Plaintiff, TIMOTHY BARRETT, (“Plaintiff”), brings this statewide class action complaint to enjoin the deceptive advertising and business practices of MILWAUKEE ELECTRIC TOOL, INC., d/b/a STILETTO TOOLS, INC. (collectively “STILETTO” or “Defendant”) with regard to Defendant’s false promotion of its hammers being “100% Handcrafted” when in fact they are entirely manufactured using mechanized processes as demonstrated by a video posted on Defendant’s website and Defendant’s own patents.
2. Defendant labels the hammers it manufactures and sells as “100% Handcrafted.” Yet, Defendant’s video and patents show they employ an entirely mechanized process to make hammers including the use of (1) an investment casting process to forge hammers; (2) an injection molding process to make rubber handles; (3) an injection molding process to make “poly fiberglass” handles; (4) a machining process to surface and “mill” the striking face of the hammer heads; (5) a mechanical or hydraulic press to “shrink fit” the striking face to the rest of the hammer head.
3. Defendant attaches these untrue and misleading labels to all of the hammers it markets and sells throughout the state of California and throughout the United States.
4. This nationwide sale and advertising of deceptively labeled products constitutes: (1) a violation of California’s Unfair Competition Law (“UCL”), Bus. & Prof. Code §§ 17200 et seq.; (2) a violation California’s False Advertising Law (“FAL”), Bus. & Prof. Code §§ 17500 et seq.; (3) negligent misrepresentation; and (4) intentional misrepresentation. This conduct caused Plaintiff and other consumers similarly situated damages and requires restitution and injunctive relief to remedy and prevent further damages.

- 1 5. Unless otherwise indicated, the use of any Defendant's name in this
2 Complaint includes all agents, employees, officers, members, directors,
3 heirs, successors, assigns, principals, trustees, sureties, subrogees,
4 representatives and insurers of the named Defendant.

5 NATURE OF ACTION

- 6 6. At all times relevant, MILWAUKEE ELECTRIC TOOL, INC., d/b/a
7 STILETTO TOOLS, INC., has made, and continues to make, affirmative
8 misrepresentations regarding the hammers it manufactures and sells.
9 Specifically, Defendant packaged, advertised, marketed, promoted, and sold
10 its hammers to Plaintiff and other consumers similarly situated, which were
11 represented by Defendant to be "100% Handcrafted."
12
13 7. However, Defendant's hammers were neither "Handcrafted" nor "100%
14 Handcrafted" as their own patents, filed over a decade ago, describe the true
15 mechanized means by which Defendant manufactures its products and even
16 tout the limited human involvement in the manufacturing process.
17
18 8. These patented processes are depicted in a video, entitled "Tibone Casting
19 Process" (the "video"), Defendant posted on its website.¹ The video goes
20 through each stage of the investment casting process, showing actual
21 Stiletto hammers being made by machines rather than by hand as Defendant
22 advertises.
23
24 9. "Handmade" and "handcrafted" are terms that consumers have long
25 associated with higher quality manufacturing and high-end products. This
26 association and public perception is evident in the marketplace where
27 manufacturers charge a premium for handcrafted goods. In the case of
28 hammers, most commercially available hammers range in price from as
little as \$10 to about \$40.² Whereas, Defendant's purportedly "100%

¹ See <https://stiletto.com/t-Video.aspx>

² See the price listing for "hammers" on the website of the national home improvement store

Handcrafted” titanium hammers range from \$90.00³ to \$263.00.⁴

10. Defendant affixes identical doubled-sided labels on all its hammers. On these labels, the claim “**All Stiletto hammers are 100% Handcrafted.**” appears in large *bold* font in an apparent attempt to market the tool as being of higher quality by virtue of it being made by hand. *See* Exhibit 1. As a result, Defendant charges from 2 to 5 times more for its hammers on the basis they are supposedly of superior quality and workmanship.

11. Contrary to Defendant’s misleading labeling, its hammers are predominately or entirely made by mechanized processes, as demonstrated by the video posted on Defendant’s website and Defendant’s own patents. *See* Exhibits 2-5.

12. As a consequence of Defendant’s unfair and deceptive practices, Plaintiff and other consumers similarly situated have purchased Stiletto brand hammers under the false impression that the hammers were of superior quality by virtue of being “100% Handcrafted” and thus worth an exponentially higher price as compared to other hammers.

13. Each consumer, including Plaintiff, was exposed to virtually the same material misrepresentations, as the identical labels were prominently placed on all of the hammers Defendant markets and sells throughout the U.S. and the State of California.

14. As a result of Defendant’s misrepresentations regarding its hammers, Plaintiff and other consumers similarly situated overpaid for the product, believing that the hammers they purchased were of superior quality because they were “100% Handcrafted.” As a result of Defendant’s false representations, the value of the product was diminished at the time it was sold to consumers. Had Plaintiff and other consumers similarly situated

“Home Depot” available at: <http://www.homedepot.com/s/hammer?NCNI-5>

³ *See* <https://stiletto.com/p-44-10-oz-titanium-smooth-face-curved-145-finish-hammer.aspx>

⁴ *See* <https://stiletto.com/p-28-tibone-tbii-15-milled-facestraight-18-ti-hdl.aspx>

1 been made aware that Stiletto hammers were not in fact “100%
2 Handcrafted” they would not have purchased the hammers, would have
3 paid less for them, or purchased different hammers.

4 15. As a result of Defendant’s false and misleading statements, as well as
5 Defendant’s other conduct described herein, Plaintiff and other consumers
6 similarly situated purchased thousands of Stiletto hammers and have
7 suffered, and continue to suffer, injury in fact including the lost of money
8 and/or property.

9 16. Defendant’s conduct as alleged herein violates several California state laws,
10 as more fully set forth herein.

11 17. This action seeks, among other things, equitable and injunctive relief;
12 restitution of all amounts illegally retained by Defendant; and disgorgement
13 of all ill-gotten profits from Defendant’s wrongdoing alleged herein.

14 **JURISDICTION AND VENUE**

15 18. The Court has subject matter jurisdiction pursuant to 28 U.S.C. § 1332(a),
16 as the matter in controversy, exclusive of interest and costs, exceeds the
17 sum or value of \$75,000 and is an action in which the named Plaintiff is a
18 citizen of a State different from Defendant.

19 19. The Court has concurrent subject matter jurisdiction pursuant to 28 U.S.C.
20 § 1332(d), as the matter in controversy, exclusive of interest and costs,
21 exceeds the sum or value of \$5,000,000 and is a class action in which the
22 named Plaintiff is a citizen of a State different than at least one Defendant.

23 20. Defendant boasts it is “The First Name in Titanium Tools” and its products
24 are sold in major home improvement stores, like The Home Depot,
25 nationwide. Based upon the advertised high retail price of Defendant’s
26 product and its nationwide availability, Plaintiff is informed, believes, and
27 thereon alleges the class damages exceed the \$5,000,000 threshold as set by
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28 U.S.C. § 1332(d) for a diversity jurisdiction class action.

21. This Court has personal jurisdiction over Defendant because Defendant does business in the State of California, is incorporated in the State of Delaware, has principal place of business in the State of Wisconsin, has sufficient minimum contacts with this state, and otherwise purposely avails itself of the markets in this state through the promotion, sale, and marketing of its products in this state, to render the exercise of jurisdiction by this Court permissible under traditional notions of fair play and substantial justice.

22. Venue is proper in this Court pursuant to 28 U.S.C. § 1391, in that Plaintiff resides within the judicial district and many of the acts and transactions giving rise to this action occurred in this district because Defendant:

- (a) is authorized to conduct business in this district and has intentionally availed itself of the laws and markets within this district;
- (b) does substantial business in this district;
- (c) is subject to personal jurisdiction in this district; and
- (d) the harm to Plaintiff occurred within this district.

PARTIES

23. Plaintiff is, and at all relevant times was, a natural person residing in the State of California, County of San Diego.

24. Plaintiff is informed and believes, and thereon alleges, that Defendant's principal place of business is in Wisconsin, is incorporated under the laws of the State of Delaware, and does business within the State of California and within this district.

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GENERAL ALLEGATIONS

25. In 2007 MILWAUKEE ELECTRIC TOOL, INC. purchased STILETTO TOOLS, INC. and continues to do business as, market, and sell products under the “Stiletto Tools, Inc.” trade name.⁵
26. STILETTO manufactures a variety of hand tools, most of which are made of titanium. STILETTO is most known for its titanium hammers which come in three varieties, (1) the “Tibone” (2) the “Titanium Hickory” and (3) “Titanium Ply Fiberglass.” All of these models come with a titanium hammer head that varies in weight from 10oz to 16oz. Each of the three variations come with different handles.
27. The “Tibone” model is an *all metal* construction hammer with removable “milled” striking surface. The removable striking surface being the portion of the hammer’s head that comes in contact with a nail. See photos below in ¶ 28 and ¶ 29:

28.



⁵ See <https://stiletto.com/t-about.aspx>

1 29.



19 30. On July 17, 2014, Plaintiff purchased a Stiletto “Tibone” hammer (*see* ¶ 29)
20 for \$222.60 from Dixieline Lumber in Solana Beach, California.

21 31. When Plaintiff purchased Defendant’s hammer, he was searching for a
22 higher quality hammer in hopes that it would last longer and perform better
23 than other hammers of lesser quality. After examining a variety of models,
24 Plaintiff decided to purchase a Stiletto brand “Tibone” hammer. While
25 Plaintiff was apprehensive about spending exponentially more money as
26 compared to other manufacturers’ hammers, Plaintiff purchased a Stiletto
27 brand hammer because its label proclaimed, “**All Stiletto hammers are**
28 **100% Handcrafted**” in large bold lettering. (*See* Exhibit 1). Based on the

1 representations contained on this label, Plaintiff believed was of superior
2 workmanship and quality.

3 32. While Plaintiff assumed that because the hammer was supposedly
4 “Handmade” it would last longer, during Plaintiff’s initial use of the
5 hammer he noticed the striking face (*see* ¶ 29) was loose and appeared to be
6 improperly set in the hammer head and that the rubber grip was beginning
7 to separate from the metal handle.

8 33. Plaintiff then began to notice a host of details that led him to believe that
9 the hammer Plaintiff purchased was *not* in fact “Handcrafted,” let alone
10 “100% Handcrafted” as Defendant had advertised, but was in fact machine
11 built and therefore of inferior quality.

12 34. For instance, the Tibone hammer that Plaintiff purchased has a seam of
13 excess rubber material or “flashing” along the top and bottom ridges of the
14 rubber grip indicative of a rubber injection mold process. This seam is
15 evident on all of the Tibone and Polly Fiberglass model hammers, both of
16 which use identical, or very similar, rubber grips.

17 35. The bottom of the hammer’s grip also has excess material that appears to be
18 the site at which the rubber material was “injected” into the mold by an
19 injection molding process.

20 36. Furthermore, the hammer’s grip contains sharp lines, distinct contours, and
21 a company logo which are embossed into the rubber grip. *See* ¶ 28. These
22 embossments are indicative of an injection molding process and would not
23 be feasible unless a molding process were used to produce the grip.

24 37. Plaintiff is therefore informed and believes, and thereon alleges that
25 Defendant utilized a mechanized injection molding process to manufacture
26 the grip of the hammer Plaintiff purchased; and therefore, the hammer is not
27 “100% Handcrafted” as Defendant advertised.

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38. The Tibone hammer Plaintiff purchased also has a “milled” detachable striking surface, commonly referred to as a “milled face”. *See* ¶ 29.

39. Based upon the sharp edges and exacting angles, the “milled face” appears to have been created using a precise machining process rather than by hand.

40. Plaintiff is therefore informed and believes, and thereon alleges that Defendant utilized a mechanized process to manufacture the “milled face” of the hammer Plaintiff purchased and therefore the hammer is not “100% Handcrafted” as Defendant advertised.

41. Other than the rubber grip, the Tibone hammer Plaintiff purchased is made entirely, or nearly entirely, of titanium. The metal portions of this hammer were produced using an “investment cast” process described in detail by Defendant’s patents and a video posted on Defendant’s website, both of which are discussed herein.

42. In 1997, Mark Martinez acquired the Trademark and production rights of “Stiletto” tools. Mr. Martinez along with co-inventors, John Thorne, Thomas Yost, and Philip Maier invented a titanium hammer. These inventors applied for and were granted a series of patents related to their invention. *See* Exhibits 2-5.

43. Patent Number 6,536,308 is listed on the bottom of Defendant’s offending label and is one of the patents which describes the process by which Defendant’s hammers are manufactured. The patent states, “In the manufacture and assembly of a hammer and wedge tools embodiments of the present invention, the titanium hammer head body or wedge body is formed using investment casting techniques.” *See* Exhibit 2 at p. 6. (emphasis added).

44. This “investment casting” process is achieved through the use of an investment casting machine, or “Injection Mold Apparatus,” and a

1 mechanized process described in detail by co-inventor Thomas Yost's
2 patents. *See* Exhibits 4 and 5.

3 45. Patents 5,908,643 and 6,180,047 (attached hereto as Exhibits 4 and 5
4 respectively) describe the machine, or "Injection Mold Apparatus" and the
5 process by which Defendant makes sacrificial wax patterns for its
6 "investment casting of metal parts." (*See* Exhibit 4 at p. 17).

7 46. The entire "investment casting" process is described and shown by a nearly
8 five minute long video posted on Defendant's website entitled "Tibone
9 Casting Process." Defendant's video states "FS Precision Tech"
10 manufactures its hammers. FS Precision Tech ("FS Tech") also posted the
11 video on its YouTube Channel.⁶

12 47. The video begins by stating the narrator went to FS Tech's facility to see
13 how Stiletto hammers are "made." The video then goes on to describe the
14 "multi-step process called investment casting" used to manufacture Stiletto
15 hammers. The video states this process is used "for every single titanium
16 hammer that is made" by Stiletto.

17 48. According to the video, the first step in the investment casting process is to
18 create a "wax hammer" using an "injection press" to create a "negative
19 cavity mold." The video shows a series of large hydraulically operated
20 industrial presses forming the sacrificial wax replicas. This process appears
21 to be entirely mechanized with no involvement from a human worker.

22 49. The video then states the sacrificial wax replica molds are affixed to a "tree
23 so 12 hammers can be made at once." The "tree" of connected wax molds
24 are then dipped in a "ceramic slurry." After a few coats of this heat resistant
25 ceramic slurry, "the wax is melted out by heating the shells under pressure
26 to 350 degrees." The video displays a worker locking the "trees" into an
27 approximately 8 feet by 15 feet cylindrical chamber resembling a kiln. This
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⁶ *See* <https://www.youtube.com/watch?v=WXFRRg8YMT0>

leaves the hardened ceramic slurry in the shape of the hammer remaining.

50. The video then shows the forging process where the hammers are made. A worker enters a large chamber, approximately 10 feet by 10 feet, and places one of the “trees” containing the connected molds of 12 hammers under a large injection apparatus. The worker then shuts the chamber’s door to make an “atmosphere free vacuum.” The worker then watches the forging apparatus inject molten metal into the “tree” from a TV monitor about 25 feet from the chamber and hammers being forged.

51. The video then states, “once the titanium hammers cool the ceramic gets vibrated off by a pneumatic knockout hammer.” At this point the video shows a worker watching, from a few feet away, a stack of about six “trees” being vibrated inside a large machine. The ceramic coating is removed by this machine, leaving behind the “trees” of 12 connected hammers.

52. Not only is Defendant’s use of an investment cast process irrefutably shown by this video, but the use of the process is also further evidenced by the appearance of Defendant’s hammers. The metal portion of the Tibone hammer’s handle is embossed with a “Stiletto” logo. This portion of the hammer has a matte finish indicative of the casting process rather than hand engraving which leaves a shaved appearance as a result of shearing material away to achieve the logo’s indentations.

53. Additionally, the Tibone hammer features a patented “side nail puller.” *See* ¶ 54; Patent 6,923,432, Exhibit 3.

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1 54.



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15 55. The “side nail puller” patent describes the means of producing the nail
16 puller stating, “the nail puller is fashioned by casting or forging the opening
17 into the hammer. The embodiment is a unitized cast hammer where in the
18 shaft is integral to the head.” *See* Exhibit 3 at p. 9. (emphasis added, internal
19 references omitted).

20 56. The patent goes on to state, “In some embodiments, the side nail puller may
21 be manufactured by machining, punching or other metal removal process.
22 In still other embodiments, the side nail puller may be mechanically
23 attached to the head by welding, brazing, fastening, or other means.” *See*
24 Exhibit 3 at p. 10. (emphasis added, internal references omitted.)

25 57. Based upon the video posted on Defendant’s website and Defendant’s
26 patents, Plaintiff is informed, believes, and thereon alleges that Defendant
27 utilized a mechanized process of investment casting to manufacture the
28 hammer he purchased; and therefore, the hammer is not “100%

Handcrafted” as Defendant advertised.

58. As a result of Defendant’s misrepresentations regarding its hammers, Plaintiff and other putative class members were induced into purchasing and overpaying for the product believing that the hammers they purchased were of superior quality because they were “100% Handcrafted.” As a result of Defendant’s false representations, the value of the product was diminished at the time it was sold to consumers. Had Plaintiff and other consumers similarly situated been made aware that Stiletto hammers were not in fact “100% Handcrafted” they would not have purchased the hammers, would have paid less for them, or purchased different hammers.

59. During the “Class Period,” as defined below, Plaintiff and others similarly situated were exposed to and saw Defendant’s advertising, marketing, and packaging claims disseminated by Defendant for the purpose of selling goods, purchased Defendant’s product in reliance on these claims, and suffered injury in fact and lost money or property as a result of Defendant’s unfair, misleading and unlawful conduct described herein.

60. In making Plaintiff’s decision to purchase a Stiletto hammer, Plaintiff relied upon, *inter alia*, the advertising and/or other promotional materials prepared and approved by Defendant and its agents and disseminated through its product’s packaging containing the misrepresentations alleged herein.

61. Producing consumer goods by means of mechanized or automated process has long be touted as a cheaper way to “mass produce” consumer goods. By utilizing machines to produce goods, manufacturers are able to make more goods in a shorter period of time at a lower cost. Mechanization of course sacrifices quality, as machines cannot exercise the skill and care of a human craftsman. Every consumer would undoubtedly prefer a higher quality product, but many are not be able or willing to pay for such quality. The demand for higher quality products has always existed amongst consumers

1 and thus manufacturers market their products to those seeking higher
2 quality goods and demand a premium price for that quality.

3 62. Defendant seeks to capitalize on consumers' preference for higher quality
4 tools; and to that end has intentionally marketed itself as "The First Name
5 in Titanium Tools." *See* Exhibit 1. Defendant makes specific
6 representations about the workmanship of hammers stating, "**All Stiletto**
7 **hammers are 100% Handcrafted.**" *See* Exhibit 1.

8 63. Defendant is aware that consumers are willing to pay more for products of
9 higher quality; and for that reason Defendant has marketed its hammers as
10 "100% Handcrafted" to sell more of its product and to sell its product at a
11 higher price in comparison to competitors' products.

12 64. The scope of Defendant's misleading advertising is publicly disseminated
13 on a widespread and continuous basis during the Class Period as the
14 offending label containing the bold and conspicuously placed "100%
15 Handcrafted" text was affixed to all of the hammers Defendant sold in
16 major home improvement stores, including The Home Depot, throughout
17 the State of California and throughout the United States.

18 65. Defendant's label was untrue, false, and misleading to Plaintiff and putative
19 class members as a reasonable consumer would have interpreted
20 Defendant's claims according to their common meaning. Meridian Webster
21 defines "handcrafted" as "created by a hand process rather than by a
22 machine."⁷ Therefore, the reasonable consumer would have been misled
23 into believing Stiletto hammers are made by hand when in fact they are
24 neither made by hand nor "100% Handcrafted" as Defendant advertises.

25 66. Defendant knew, or in the exercise of reasonable care should have known,
26 its labels were misleading based upon Defendant's patents and content
27 posted on Defendant's own website. Defendant could have easily omitted
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⁷ <http://www.merriam-webster.com/thesaurus/handcrafted>

the bold text “100% Handcrafted” from its hammers’ packaging. However, Defendant deliberately chose to insert such text and intentionally or negligently retained that false claim within its product’s packaging for the purpose of selling its product.

67. Defendant made a tactical decision to deceive consumers with the intent of reaping the financial benefit of the false, misleading, and deceptive advertising regarding the mechanized means it employs in the manufacturing of its products, intentionally capitalizing on a reasonable consumer’s trust in a nationally branded company perceived to supply quality handcrafted tools.

**I. FIRST CAUSE OF ACTION FOR VIOLATIONS OF
CAL. BUS. & PROF. CODE §§ 17500 ET SEQ.
(California’s False Advertising Law)**

68. Plaintiff repeats, re-alleges and incorporates herein by reference the above allegations as if set forth fully herein.

69. Plaintiff brings this cause of action on behalf of himself and on behalf of the putative Class.

70. Plaintiff and Defendant are both “person[s]” as defined by California Business & Professions Code § 17506. Section 17535 authorizes a private right of action on both an individual and representative basis.

71. The misrepresentations, acts, and non-disclosures by Defendant of the material facts detailed above constitute false and misleading advertising and therefore violate Business & Professions Code §§ 17500 *et seq.*

72. At all times relevant, Defendant’s advertising and promotion regarding all of its hammers being “100% Handcrafted” was untrue, misleading and likely to deceive the public, a reasonable consumer, and has deceived the Plaintiff and California consumers similarly situated by representing that the product was “100% Handcrafted” when in fact Defendant knew and

1 failed to disclose that its hammers were made predominately or entirely by
2 machines through the use of mechanized processes.

3 73. Defendant engaged in the false and/or misleading advertising and marketing
4 as alleged herein with the intent to directly or indirectly induce the purchase
5 hammers that Defendant knew, or had reason to know, were not “100%
6 Handcrafted.”

7 74. In making and publicly disseminating the statements and/or omissions
8 alleged herein, Defendant knew or should have known that the statements
9 and/or omissions were untrue or misleading, and acted in violation of
10 California Business & Professions Code §§ 17500 *et seq.*

11 75. Plaintiff and members of the putative Class have suffered injury in fact and
12 have lost money and/or property as a result of Defendant’s false advertising,
13 as more fully set forth herein. Plaintiff and members of the Class have been
14 injured because they were induced to purchase and overpay for Stiletto
15 hammers, since the value of the product was diminished at the time of sale.
16 Plaintiff and members of the putative Class have been injured because had
17 they been made aware that Stiletto hammers are not handcrafted, but rather
18 produced by a less desirable mechanized processes, they would have not
19 purchased the hammers, would have paid less for them, or would have
20 purchased different hammers from another manufacturer.

21 76. At a date presently unknown to Plaintiff, but at least four years prior to the
22 filing of this action, and as set forth above, Defendant has committed acts of
23 untrue and misleading advertising and promotion of Stiletto hammers, as
24 defined by Business & Professions Code §§ 17500 *et seq.*, by engaging in
25 the false advertising and promotion of “All” Stiletto hammers as being
26 “100% Handcrafted” in its product’s labeling.

27 77. The false and misleading advertising of Defendant, as described above,
28 presents a continuing threat to consumers as Defendant continues to use the

deceptive labels and advertising which will continue to mislead consumers who purchase Stiletto hammers under false premises.

78. As a direct and proximate result of the aforementioned acts and representations of Defendant, Defendant received and continues to hold monies rightfully belonging to Plaintiff and other similarly situated consumers who were led to purchase, purchase more of, or pay more for, Stiletto hammers, due to the unlawful acts of Defendant, during the Class Period.

**II. SECOND CAUSE OF ACTION FOR VIOLATIONS OF
CAL. BUS. & PROF. CODE §§ 17200 ET SEQ.
(California's Unfair Competition Law)**

79. Plaintiff repeats, re-alleges and incorporates herein by reference the above allegations as if fully stated herein.

80. "Unfair competition" is defined in Business and Professions Code Section § 17200 as encompassing any one of the five types of business "wrongs," three of which are at issue here: (1) an "unlawful" business act or practice; (2) an "unfair" business act or practice; and (3) a "fraudulent" business act or practice. The definitions in § 17200 are disjunctive, meaning that each of these five "wrongs," of which Plaintiff alleges three of them, operates independently from the others.

81. Plaintiff and Defendant are both "person[s]" as defined by California Business & Professions Code § 17201. Section 17204 authorizes a private right of action on both an individual and representative basis.

A. "Unlawful" Prong

82. Because Defendant has violated California's False Advertising Law, Business & Professions Code §§ 17500 *et seq.*, Defendant has violated California's Unfair Competition Law, Business & Professions Code §§

17200 *et seq.*, which provides a cause of action for an “unlawful” business act or practice perpetrated on members of the California public.

83. Defendant had other reasonably available alternatives to further Defendant’s legitimate business interest, other than the conduct described herein, such as selling hammers without falsely stating that Stiletto hammers were “100% Handcrafted.”

84. Plaintiff and the putative class reserve the right to allege other violations of law, which constitute other unlawful business practices or acts, as such conduct is ongoing and continues to this date.

B. “Unfair” Prong

85. Defendant’s actions and representations constitute an “unfair” business act or practice under § 17200, in that Defendant’s conduct is substantially injurious to consumers, offends public policy, and is immoral, unethical, oppressive, and unscrupulous as the gravity of the conduct outweighs any alleged benefits attributable to such conduct. Without limitation, it is an unfair business act or practice for Defendant to knowingly and negligently represent to the consuming public, including Plaintiff, that *all* Stiletto hammers are “100% Handcrafted” when in fact they are predominately or entirely manufactured by mechanized processes rather than by hand. Such conduct by Defendant is “unfair” because it offends established public policy and/or is immoral, unethical, oppressive, unscrupulous and/or substantially injurious to consumers in that consumers are led to believe that Stiletto hammers are of superior quality and workmanship by virtue of the hammers being “Handcrafted,” when in fact they are not. Defendant’s product labeling misleads and deceives consumers into believing Stiletto hammers are “100% Handcrafted,” when actually they are entirely, or almost entirely, manufactured by mechanized processes.

- 1 86. At a date presently unknown to Plaintiff, but at least four years prior to the
2 filing of this action, and as set forth above, Defendant has committed acts of
3 unfair competition as defined by Business & Professions Code §§ 17200 *et*
4 *seq.*, by engaging in the false advertising and promotion of Stiletto hammers
5 as, *inter alia*, “100% Handcrafted.”
- 6 87. Plaintiff and other members of the Class could not reasonably have avoided
7 the injury suffered by each of them. Plaintiff reserves the right to allege
8 further conduct that constitutes other unfair business acts or practices. Such
9 conduct is ongoing and continues to this date, as Defendant has failed to
10 request the removal of deceptively labeled products from its resellers’
11 stores.
- 12 88. Defendant could have and should have furthered its legitimate business
13 interests by expressly indicating in its labeling that its hammers are in fact
14 made by machines rather than by hand. Alternatively, Defendant could have
15 refrained from misstating that Stiletto hammers were “100% Handcrafted”
16 when in fact they are not.

17 C. “Fraudulent” Prong

- 18 89. Defendant’s claims and misleading statements were false, misleading
19 and/or likely to deceive the consuming public within the meaning of
20 Business & Professions Code §§ 17200 *et seq.* Defendant engaged in
21 fraudulent acts and business practices by knowingly or negligently
22 representing to Plaintiff, and other similarly situated consumers, whether by
23 conduct, orally, or in writing by:
- 24 (a) Intentionally and misleadingly designing the product’s label to
25 conspicuously state that Stiletto hammers are “100%
26 Handcrafted” without accurately identifying the true mechanized
27 means by which the hammers are manufactured.
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(b) Intentionally and misleadingly allowing Defendant's resellers to use and advertise Stiletto hammers through the use of Defendant's labels which contain misleading and false statements.

90. Plaintiff reserves the right to allege further conduct that constitutes other fraudulent business acts or practices. Such conduct is ongoing and continues to this date.

91. The fraudulent, unlawful and unfair business practices and false and misleading advertising of Defendant, as described above, presents a continuing threat to consumers in that they will continue to be misled into purchasing Stiletto hammers under false premises.

92. As a direct and proximate result of the aforementioned acts and representations of Defendant, Defendant received and continues to hold monies rightfully belonging to Plaintiff and other similarly situated consumers who were led to purchase, purchase more of, or pay more for, the Stiletto hammers, due to the unlawful acts of Defendant.

93. Thus, Defendant caused Plaintiff and other members of the Class to purchase Stiletto hammers under false premises during the Class Period.

94. Defendant has engaged in unlawful, unfair and fraudulent business acts or practices, entitling Plaintiff, and putative class members, to a judgment and equitable relief against Defendant, as set forth in the Prayer for Relief. Pursuant to Business & Professions Code § 17203, as result of each and every violation of the UCL, which are continuing, Plaintiff is entitled to restitution and injunctive relief against Defendant, as set forth in the Prayer for Relief.

95. Plaintiff and members of the putative class have suffered injury in fact and have lost money or property as a result of Defendant's unfair competition, as more fully set forth herein. Plaintiff and members of the putative class

1 have been injured as they overpaid for Stiletto hammers, since the value of
2 the product was diminished at the time of sale. Plaintiff and members of the
3 Class have been injured as had they been made aware that the product was
4 machine rather than handcrafted, they would not have purchased the
5 product, would have paid less for it, or purchased a different product from
6 another manufacturer.

7 96. Defendant, through its acts of unfair competition, has unfairly acquired
8 monies from Plaintiff and members of the putative class. It is impossible for
9 the Plaintiff to determine the exact amount of money that Defendant has
10 obtained without a detailed review of the Defendant's books and records.
11 Plaintiff requests that this Court restore these monies and enjoin Defendant
12 from continuing to violate California Business & Professions Code §§
13 17200 *et seq.*, as discussed above.

14 97. Unless Defendant is enjoined from continuing to engage in the unlawful,
15 unfair, fraudulent, untrue, and deceptive business acts and practices as
16 described herein, consumers residing within California, will continue to be
17 exposed to and damaged by Defendant's unfair competition.

18 98. Plaintiff also seeks an order requiring Defendant to undertake a public
19 information campaign to inform members of the putative class of its prior
20 acts or practices in violation of the law as alleged herein.

21 99. Plaintiff further seeks an order requiring Defendant to make full restitution
22 of all moneys wrongfully obtained and disgorge all ill-gotten revenues
23 and/or profits, together with interest thereupon.

24 100. Plaintiff also seeks attorneys' fees and costs pursuant to, *inter alia*,
25 California Civil Code section 1021.5.

26 ///

27 ///

28 ///

**III. THIRD CAUSE OF ACTION
FOR NEGLIGENT MISREPRESENTATION**

101. Plaintiff repeats, re-alleges and incorporates herein by reference the above allegations as if fully stated herein.

102. At a date presently unknown to Plaintiff, but at least four years prior to the filing of this action, and as set forth above, Defendant represented to the public, including Plaintiff, by packaging and other means, that “All Stiletto hammers are 100% Handcrafted,” as described above.

103. Defendant made the representations herein alleged with the intention of inducing the public, including Plaintiff, to purchase Stiletto hammers.

104. Plaintiff and other similarly situated persons in California saw, believed, and relied upon Defendant’s advertising representations and, in reliance on them, purchased the products, as described above.

105. At all times relevant, Defendant made the misrepresentations herein alleged; and Defendant had no reasonable ground/s for believing the representations to be true, especially after having patented the mechanized processes for manufacturing its hammers.

106. As a proximate result of Defendant’s negligent misrepresentations, Plaintiff and other consumers similarly situated were induced to purchase, purchase more of, or pay more for, Stiletto hammers, due to the unlawful acts of Defendant, in an amount to be determined at trial, during the Class Period.

**IV. FOURTH CAUSE OF ACTION
FOR INTENTIONAL MISREPRESENTATION**

107. Plaintiff repeats, re-alleges and incorporates herein by reference the above allegations as if fully stated herein.

108. At a date presently unknown to Plaintiff, but at least four years prior to the filing of this action, and as set forth above, Defendant intentionally represented to the public, including Plaintiff, by promoting and other

1 means, that “All Stiletto hammers are 100% Handcrafted,” in the product’s
2 labeling, as described above. Defendant’s representations were untrue.

3 109. Defendant made the representations herein alleged with the intention of
4 inducing the public, including Plaintiff, to purchase Stiletto hammers, for
5 Defendant’s own financial gain.

6 110. Defendant made such misrepresentations in the labeling of its Stiletto brand
7 hammers.

8 111. The statements regarding “All Stiletto hammers” being “100%
9 Handcrafted,” were misleading because Defendant actually uses an entirely,
10 or nearly entirely, mechanized process for manufacturing its Stiletto
11 hammers. The hammers are therefore neither “Handcrafted” nor “100%
12 Handcrafted” as Defendant advertises on its product’s labeling.

13 112. Plaintiff and other similarly situated persons in California saw, believed,
14 and relied upon Defendant’s advertising representations and, in reliance on
15 such representations, purchased the products, as described above.

16 113. At all times relevant, Defendant made the misrepresentations herein
17 alleged, allowed the misrepresentations to continue to be made by its
18 resellers and Defendant knew the representations to be false.

19 114. As a proximate result of Defendant’s intentional misrepresentations,
20 Plaintiff and other consumers similarly situated were induced to spend an
21 amount of money to be determined at trial on Defendant’s Stiletto hammers.

22 115. Plaintiff is informed and believes, and thereupon alleges, that Defendant
23 knew that Stiletto hammers were not handcrafted nor “100% Handcrafted,”
24 but nevertheless made representations that its hammers were 100%
25 handcrafted intending that consumers and the unknowing public rely on
26 their representations.

27 116. Plaintiff is informed and believes, and thereupon alleges, that Defendant
28 knew that retailers were advertising its Stiletto hammers as “100%

Handcrafted” as Defendant designed, manufactured, and affixed the product labeling to its hammers before supplying their products to retailers.

117. Plaintiff and other consumers similarly situated, in purchasing and using the products as herein alleged, did rely on Defendant’s representations, including the representations on Stiletto hammer’s label, all to their damage and/or detriment as herein alleged.

118. As was the case in *Astiana v. Ben & Jerry's Homemade, Inc.*, 2011 U.S. Dist. LEXIS 57348, *15 (N.D. Cal. May 26, 2011), Plaintiff here alleges the “who, what, when, where, and how” of the alleged deception by Defendant.

- a. The “who” is Defendant Milwaukee Electric Tool, Inc., d/b/a Stiletto Tools, Inc.;
- b. The “what” is representation that “All” Defendant’s Stiletto are “100% Handcrafted”;
- c. The “when” is the date Plaintiff purchased the product and the Class Period of four years prior to the filing of the Complaint;
- d. The “where” is in Defendant’s product labeling (*See* Exhibit 1); and
- e. The “how” is the allegation that Defendant did not disclose that its Stiletto hammers were not “100% Handcrafted” but rather produced entirely, or almost entirely, by mechanized processes, not by hand.

119. By engaging in the acts described above, Defendant is guilty of malice, oppression, and fraud, and each Plaintiff is therefore entitled to recover exemplary or punitive damages.

CLASS ACTION ALLEGATIONS

120. Plaintiff and the members of the Class have all suffered injury in fact as a result of the Defendant’s unlawful and misleading conduct.

121. The “Class Period” means four years prior to filing of the Complaint in this

1 action.

2 122. Plaintiff brings this lawsuit on behalf of himself and the other California
3 consumers similarly situated under Rule 23(b)(2) and (b)(3) of the Federal
4 Rules of Civil Procedure. Subject to additional information obtained
5 through further investigation and/or discovery, the proposed “Class”
6 consists of:

7
8 “All persons who purchased a Stiletto hammer in the
9 State of California within four years prior to the filing of
10 the Complaint in this action.”

11 Excluded from the Class are Defendant and any of its officers, directors,
12 and employees, or anyone who purchased a Stiletto hammer for the
13 purposes of resale. Plaintiff reserves the right to modify or amend the Class
14 definition before the Court determines whether certification is appropriate.

15 123. ***Ascertainability.*** The members of the Class are readily ascertainable by
16 resort to Defendant’s records and/or Defendant’s agent’s records regarding
17 retail and online sales, as well as through public notice.

18 124. ***Numerosity.*** The members of the Class are so numerous that their
19 individual joinder is impracticable. Plaintiff is informed and believes, and
20 on that basis alleges, that the proposed class consists of thousands of
21 members.

22 125. ***Existence and Predominance of Common Questions of Law and Fact.***
23 Common questions of law and fact exist as to all members of the Class
24 predominate over any questions affecting only individual Class members.
25 All members of the Class have been subject to the same conduct and their
26 claims are based on the standardized marketing, advertisements and
27 promotions. The common legal and factual questions include, but are not
28 limited to, the following:

- (a) Whether Stiletto hammers are manufactured by any mechanized process rather than by hand;
- (b) Whether Stiletto hammers are predominately manufactured by mechanized process rather than by hand;
- (c) Whether “All Stiletto hammers are “100% Handcrafted” as represented by Defendant.
- (d) Whether Defendant’s claims and representations above are untrue, or are misleading, or reasonably likely to deceive;
- (e) Whether Defendant’s conduct is an unlawful act or practice within the meaning of California Business & Professions Code §§ 17200 *et seq*;
- (f) Whether Defendant’s conduct is a deceptive act or practice within the meaning of California Business & Professions Code §§ 17200 *et seq*;
- (g) Whether Defendant’s conduct is an unfair act or practice within the meaning of California Business & Professions Code §§ 17200 *et seq*;
- (h) Whether Defendant’s advertising is untrue or misleading within the meaning of California Business & Professions Code §§ 17500 *et seq*;
- (i) Whether Defendant, through its conduct, received money that, in equity and good conscience, belongs to Plaintiff and members of the Class;
- (j) Whether Plaintiff and proposed members of the Class are entitled to equitable relief, including but not limited to restitution and/or disgorgement; and
- (k) Whether Plaintiff and proposed members of the Class are entitled to injunctive relief sought herein.

1 126. **Typicality.** Plaintiff's claims are typical of the claims of the members of the
2 Class in that Plaintiff is a member of the Class that Plaintiff seeks to
3 represent. Plaintiff, like members of the proposed Class, purchased Stiletto
4 hammers after exposure to the same material misrepresentations and/or
5 omissions appearing in the product's labeling, and received a product that
6 was manufactured by mechanized means rather than by hand. Plaintiff is
7 advancing the same claims and legal theories on behalf of himself and all
8 absent members of the Class. Defendant has no defenses unique to the
9 Plaintiff.

10 127. **Adequacy of Representation.** Plaintiff will fairly and adequately protect the
11 interests of the members of the Class. Plaintiff has retained counsel
12 experienced in consumer protection law, including class actions. Plaintiff
13 has no adverse or antagonistic interest to those in the Class, and will fairly
14 and adequately protect the interests of the Class. Plaintiff's attorneys are
15 aware of no interests adverse or antagonistic to those of the Plaintiff and
16 proposed Class.

17 128. **Superiority.** A class action is superior to all other available means for the
18 fair and efficient adjudication of this controversy. Individualized litigation
19 would create the danger inconsistent and/or contradictory judgments arising
20 from the same set of facts. Individualized litigation would also increase the
21 delay and expense to all parties and court system and the issues raised by
22 this action. The damages or other financial detriment suffered by individual
23 Class members may be relatively small compared to the burden and
24 expense that would be entailed by individual litigation of the claims against
25 the Defendant. The injury suffered by each individual member of the
26 proposed class is relatively small in comparison to the burden and expense
27 of individual prosecution of the complex and extensive litigation
28 necessitated by Defendant's conduct. It would be virtually impossible for

members of the proposed Class to individually redress effectively the wrongs to them. Even if the members of the proposed Class could afford such litigation, the court system could not. Individualized litigation increases the delay and expense to all parties, and to the court system, presented by the complex legal and factual issues of the case. By contrast, the class action device presents far fewer management difficulties, and provides the benefits of single adjudication, economy of scale, and comprehensive supervision by a single court. Therefore, a class action is maintainable pursuant to Fed. R. Civ. P. 23(b)(3).

129. Unless the Class is certified, Defendant will retain monies received as a result of Defendant's unlawful and deceptive conduct alleged herein. Unless a class-wide injunction is issued, Defendant will also likely continue to or allow its resellers to advertise, market, promote and package Stiletto hammers in an unlawful and misleading manner, and members of the Class will continue to be misled, harmed, and denied their rights under California law.

130. Further, Defendant has acted or refused to act on grounds that are generally applicable to the class so that declaratory and injunctive relief is appropriate to the Class as a whole, making class certification appropriate pursuant to Fed. R. Civ. P. 23(b)(2).

PRAYER FOR RELIEF

WHEREFORE, Plaintiff prays that judgment be entered against Defendant, and Plaintiff and Class members be awarded damages from Defendant as follows:

- a. Certifying the Class as requested herein;
- b. A temporary, preliminary and/or permanent order for injunctive relief requiring Defendant to: (i) discontinue advertising, marketing and otherwise representing its Stiletto hammers as "Handcrafted" or "100%

Handcrafted;” (ii) disclose the mechanized processes utilized in the manufacture of their hammers; (iii) undertake an immediate public information campaign to inform members of the proposed class as to their prior practices; and (iv) correct any erroneous impression consumers may have derived concerning the means of production for Stiletto hammers, including without limitation, the placement of corrective advertising and providing written notice to the public;

- c. An order requiring imposition of a constructive trust and and/or disgorgement of Defendant’s ill-gotten gains and to pay restitution to Plaintiff and all members of the Class and to restore to the plaintiff and members of the class all funds acquired by means of any act or practice declared by this court to be an unlawful, fraudulent, or unfair business act or practice, in violation of laws, statutes or regulations, or constituting unfair competition;
- d. Distribution of any monies recovered on behalf of members of the Class via fluid recovery or *cy pres* recovery where necessary and as applicable, to prevent Defendant from retaining the benefits of their wrongful conduct;
- e. Statutory prejudgment and post judgment interest;
- f. Special, general, and compensatory damages to Plaintiff and the Class;
- g. Exemplary and/or punitive damages for intentional misrepresentations pursuant to, *inter alia*, Cal. Civ. Code § 3294;
- h. Costs of this suit;
- i. Reasonable attorneys’ fees pursuant to, *inter alia*, California Code of Civil Procedure § 1021.5; and
- j. Awarding any and all other relief that this Court deems necessary or appropriate.

KAZEROUNI LAW GROUP, APC
245 FISCHER AVENUE, UNIT D1
COSTA MESA, CA 92626

1 Dated: July 29, 2014

KAZEROUNI LAW GROUP, APC

2 BY: /s/ ABBAS KAZEROUNIAN

3 ABBAS KAZEROUNIAN, ESQ.

4 ATTORNEYS FOR PLAINTIFF

5
6 **TRIAL BY JURY**

7 131. Pursuant to the Seventh Amendment to the Constitution of the United
8 States of America, Plaintiff is entitled to, and demands, a trial by jury.
9

10 Dated: July 29, 2014

KAZEROUNI LAW GROUP, APC

11 BY: /s/ ABBAS KAZEROUNIAN

12 ABBAS KAZEROUNIAN, ESQ.

13 ATTORNEYS FOR PLAINTIFF
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PLAINTIFF'S EXHIBIT 1

Stiletto Tool's Product Label
(Front and Back Side)

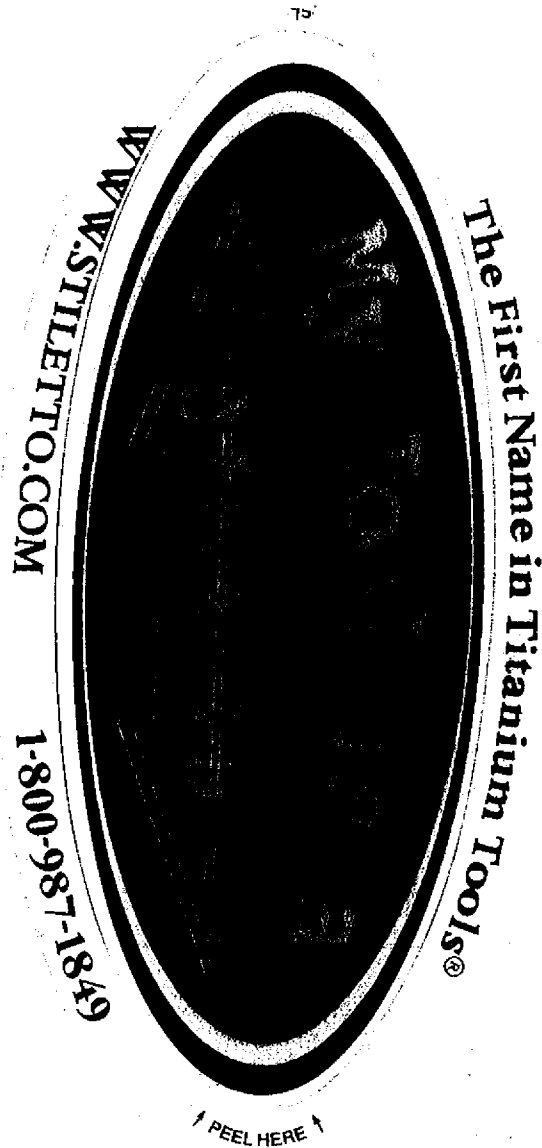
In The Case Of

Tim Barrett, Individually and On Behalf of All Others Similarly Situated,

v.

Milwaukee Electric Tool, Inc., d/b/a Stiletto Tools, Inc.

KAZEROUNI LAW GROUP, APC
245 FISCHER AVENUE, UNIT D1, COSTA MESA, CA 92626
(800) 400-6808



Thank you
for purchasing a
**Stiletto Titanium
Hammer!**

Designed to reduce the effects of nailing on your body, this lightweight Titanium hammer delivers 10 times less recoil vibration than a Steel hammer, yet it drives nails like the heavier hammers with less effort, fatigue, and pain.

All Stiletto products are covered by a one year warranty against defective materials and workmanship.

We do not warranty normal wear and tear to the face, claw, and handle or damage resulting from striking hardened Steel tools such as cat's paw, chisels, punches, etc.

Use for driving and pulling common unhardened nails only. All warranty claims must be reported to Stiletto Tools Customer Service for return authorization and are pending an evaluation before any action will be taken.

USER'S AND BYSTANDERS ALWAYS
WEAR SAFETY GOGGLES

**All Stiletto hammers are
100% Handcrafted.**



TITANIUM HAMMERS
STILETTO TOOLS, INC.
(800) 987-1849
www.stiletto.com
U.S. PATENTS
6,435,059
6,536,308

PLAINTIFF'S EXHIBIT 2

U.S. Patent No.
6,536,308

In The Case Of

Tim Barrett, Individually and On Behalf of All Others Similarly Situated,

v.

Milwaukee Electric Tool, Inc., d/b/a Stiletto Tools, Inc.

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(12) **United States Patent**
Thorne et al.

(10) **Patent No.:** **US 6,536,308 B1**
 (45) **Date of Patent:** **Mar. 25, 2003**

(54) **TOOL HAVING AN ATTACHED WORKING SURFACE**

(75) **Inventors:** **John K. Thorne**, Prescott, AZ (US);
Thomas E. Yost, Prescott, AZ (US);
Phillip M. Maier, Paulden, AZ (US);
Mark R. Martinez, Atwater, CA (US)

(73) **Assignee:** **Sturm, Ruger & Company, Inc.**,
 Southport, CT (US)

(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 72 days.

(21) **Appl. No.:** **09/686,312**

(22) **Filed:** **Oct. 11, 2000**

Related U.S. Application Data

(63) Continuation of application No. 09/476,215, filed on Dec. 30, 1999, now abandoned.

(51) **Int. Cl.⁷** **B25C 1/00**

(52) **U.S. Cl.** **81/20; 81/22**

(58) **Field of Search** **76/103; 81/20,**
81/25, 22; 428/660, 609, 684

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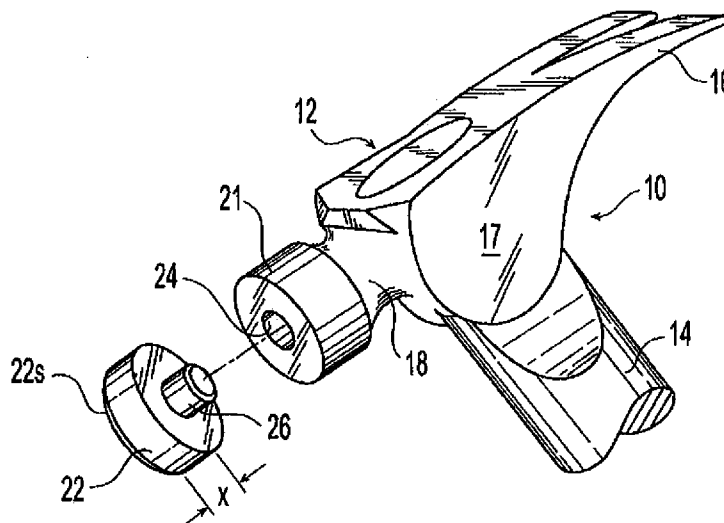
Primary Examiner—John J. Zimmerman

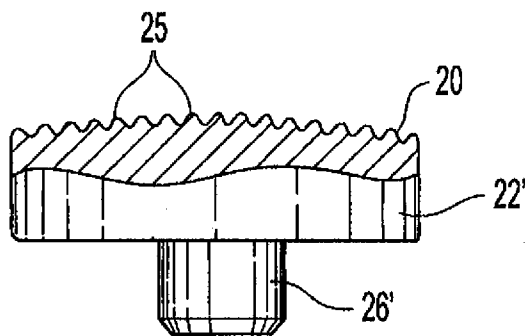
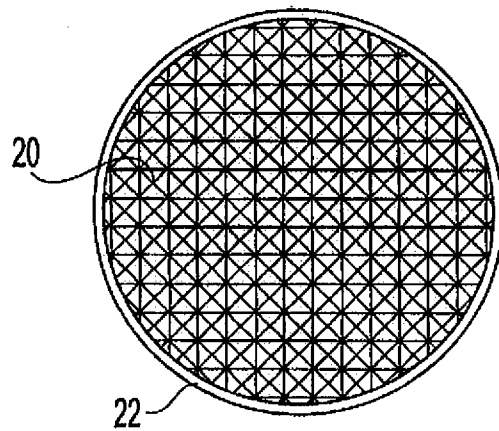
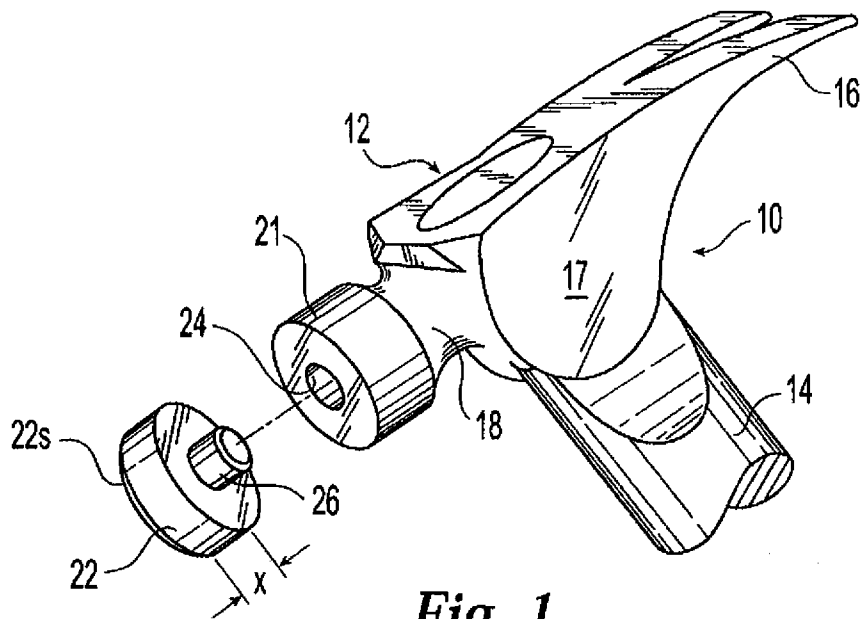
(74) *Attorney, Agent, or Firm*—Pennie & Edmonds LLP

(57) **ABSTRACT**

A tool comprised of two or more components each composed of differing materials with one component being less dense and the other component having working surface characteristics. The first component may be made of a titanium alloy.

26 Claims, 2 Drawing Sheets





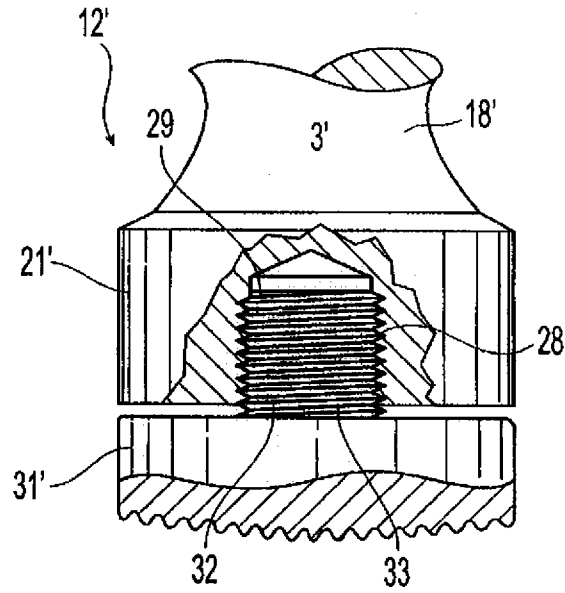


Fig. 4

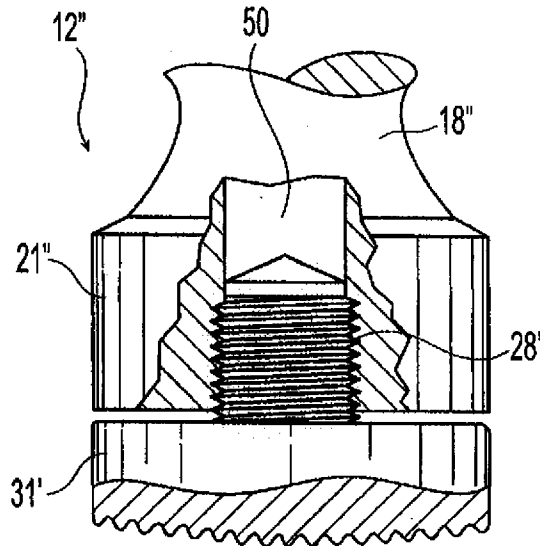


Fig. 4a

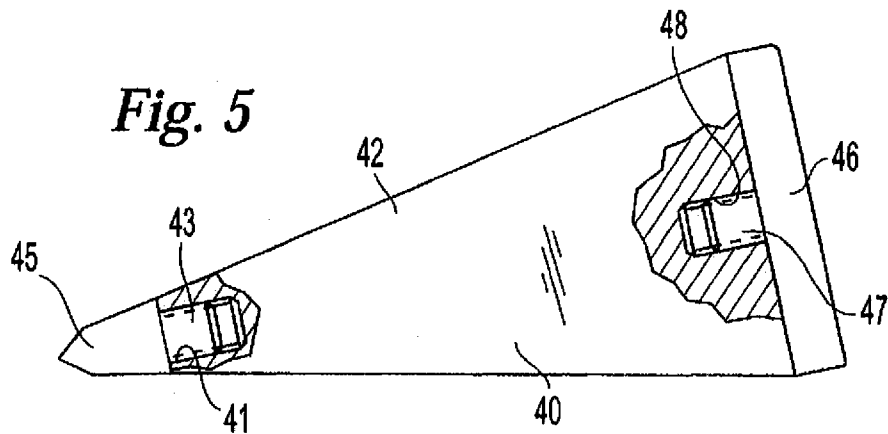


Fig. 5

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TOOL HAVING AN ATTACHED WORKING SURFACE

This is a continuation of application Ser. No. 09/476,215, filed Dec. 30, 1999, now abandoned.

BACKGROUND OF THE INVENTION

Tools which are swung or otherwise handled by users have weight and hardness characteristics. A tool made in part of a titanium alloy is lighter (has less weight per unit volume) than a tool made of steel since titanium alloys are less dense than steel. Titanium-containing tools require less effort to swing or lift. To accomplish equivalent energy at impact when the tool is used to strike objects, the tool is swung at higher speeds. Hammer heads made of titanium are lighter and easier to swing than steel heads; however, titanium is a softer material than hardened steel causing wear or distortion on and near the nail striking surface. Titanium hammers "mushroom" or otherwise deform at the striking face portion. Further, titanium hammers can create sparks when struck against certain surfaces requiring precautions to be taken.

Other steel or iron tools in use have similar drawbacks in that they are heavy enough to present a problem to users when repeatedly swung or lifted such as wedges used in log splitting and repeatedly placed in metal working mechanisms and then removed.

SUMMARY OF THE INVENTION

Broadly, the present invention comprises a tool or portion of a tool which has a first component that is composed of a material less dense than steel and therefore easier for the user to handle and a second tool component that has characteristics that are harder or otherwise useful as a working tool portion. The components are connected together.

The tool may be a tool that is swung or otherwise manipulated by the user such as a hammer or wedge used in splitting logs or may be a tool placed in and removed from a material working machine which uses tools in which weight reduction is advantageous.

The invention further includes unique arrangements for attaching the tool components together.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective exploded view of a hammer tool including the working portion of the present invention;

FIG. 2 is a bottom view of the working tool portion of FIG. 3;

FIG. 3 is an elevational partial sectional view of another embodiment of the working portion of the hammer tool of the present invention; and

FIG. 4 is a partial elevational view of a further embodiment of the invention in which the working tool portion is threadedly attached to the hammer head;

FIG. 4a is still another embodiment similar to FIG. 4 with the lower head portion having a void therein; and

FIG. 5 is a side elevational view of a wedge tool of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENTS OF THE INVENTION

In FIG. 1, hammer tool 10 includes head 12 and handle 14. Head 12 includes claw portion 16, upper body portion 17, transition portion 18, lower body portion 21 and striking

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portion 22. Portions 16, 17, 18 and 21 are made of titanium, a titanium alloy or other material having a density (weight per unit volume) less than steel. The preferred titanium alloy for hammer heads is a high strength alloy such as 90% Ti, 6% aluminum and 4% vanadium. Alternatively, the aluminum content may be in the range of 2.5%–6.75% by weight and the vanadium content in the range of 2%–4.5% by weight. The striking portion 22 is made of hardenable steel such as steel alloy 4140 which is a medium-carbon low alloy steel. Such steel can be readily hardened to substantial depth from the surface and to high hardness levels. Such hardening is accomplished in the practice of the invention to achieve good hammer or other steel characteristics. Fully hardened alloy 4140 has a Rockwell hardness of C54 to 59.

Both the titanium and steel portions are preferably investment cast but other methods of fabrication may be used. Striking portion 22 having thickness t and surface 22s do not substantially deform when the tool is used for a substantial period for striking nails or other objects.

Lower body portion 21 has cylindrical recess 24 therein. Striking portion 22 includes cylindrical projection 26 which at room temperature has a diameter of 0.004 inches greater than the diameter of recess 24. When the lower bottom portion 21 is heated to about 1300° F. recess 24 expands so that cylindrical projection 26 can be pressed into recess 24. Upon cooling, a shrink fit connection is formed in which the compressive stress holding cylindrical projection 26 is about 75% of the yield strength of the titanium alloy comprising lower body portion 21. Alternatively, the recess may be in the striking portion in which case the striking portion 22 is thermally expanded or the lower body portion 21 is thermally contracted or both prior to assembly of the two components to accomplish a shrink fit assembly. Further, in accomplishing a shrink fit connection, portion 26 may be cooled below room temperature such as to –100° F. by using dry ice.

In FIGS. 2 and 3, an alternative striking portion 22' is shown with knurled working surface 20 including hatched projections 25. Striking portion 22 or its surface 20 may be hardened to improve its ability to withstand high surface-to-surface forces without distortion or mushrooming of the tool striking surface.

Turning to FIG. 4, another embodiment of the hammer tool is shown including transition portion 18', lower head portion 21' which portion 21' has a cylindrical recess 28 with threads 29 around its circumference. Striking portion 31 has cylindrical projection 32 with complementary screw thread portion 33. A thread size $\frac{1}{4}$ –20 in which the thread is $\frac{1}{2}$ " in diameter and has 20 threads per linear inch is preferred. Prior to threading together head and striking portions 21' and 31, epoxy adhesive is applied to one or more threads 29, 33. Type 5 DP810, DP420, DP105 or DP125 adhesive made by Minnesota Mining and Manufacturing Co. (3M) or other suitable adhesive may be used. A tool striking surface portion for use as a hammer is preferably in the Rockwell C hardness range of 50 to 55, but may be less where the tool forces to be applied are less. A Rockwell hardness of about 40 is satisfactory for some uses.

FIG. 4a shows another embodiment including transition portion 18", lower head portion 21", cylindrical recess 28' and striking portion 31'. Cylindrical recess 28' has positioned above it and communicating with it a void 50. Void 50 functions to lower the overall density of the hammer head and optionally adjust the center of gravity of hammer head 12" as described further below.

Finally, FIG. 5 illustrates another embodiment of the invention which is a log-splitting wedge 40 having titanium

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alloy body 42 including recess 41. Recess 41 receives projection 43 of steel sharpened working tip section 45. Also, steel impact striking portion 46 and projection 47. Recess 41 and tip section 45 and recess 48 and tip section 47 are engaged using the shrink technique described herein or other suitable connector means.

In the manufacture and assembly of a hammer and wedge tools embodiments of the present invention, the titanium hammer head body or wedge body is formed using investment casting techniques. Hammer noses or working wedge ends are fabricated of steel or other high strength, high hardness working material and attached to the titanium head or wedge body, preferably, by shrink fitting. Tool components are fabricated for shrink fitting by forming in one component a recess and in the other component a protrusion. The temperature of the component having the recess is substantially raised, for example, to 1300° F., causing the recess to expand. Thereafter the protrusion is then pressed into the recess and the assembly allowed to cool. As cooling takes place the recess shrinks and engages the protrusion to accomplish an attachment of the two components.

An alternate method of making a hammer head or wedge includes forming the titanium head or wedge portion with a threaded opening. A steel nose or wedge tip section is formed with a mating thread. Adhesive is applied to either or both threads and the nose and head portion are threadedly engaged. Adhesive may be omitted if the threads are designed to deform during assembly to prevent separation during use of the tool.

It is also a feature of the present invention that the center of gravity (center of mass) of the hammer head may be controlled and located by:

- 1) designing the size, shape and weight of the titanium alloy portion and the size, shape and weight of the steel portion of the hammer head to achieve the desired center of gravity, including
 - a) locating a void adjacent the steel portion or at appropriate locations; or
 - b) locating a portion of tungsten or other high density material in such void.

Thus, two, three or more materials may be used in the head to achieve the desired center of gravity for most effective hammering, for user-friendly operation and good balance. The center of gravity is the location at a single point of a component for static or dynamic engineering calculations.

The use of two or more components for a tool head provides a method of placing the center of gravity of the head at a selected point so that when the head is swung through an arc using a handle the head has proper balance to provide ease and effectiveness of use. For example, the closer the center of gravity of the head to the working surface, the less torque will be created by off hits (where a portion of working surface striking the object offset from the swing arc which arc includes the head's center of gravity).

Titanium alloy is highly corrosion resistant, and whereas steel alloy 4140 will rust, an improved version for a corrosion resistant assembly is to use a lower body portion comprised of a high strength, high hardness stainless steel such as alloy 440C.

"Connector means" herein means any suitable means such as threaded connectors, welding, brazing, adhesives and shrink fitting. Shrink fitting causes the surface of a first component to be moved away from a second component surface when heated and is urged toward and against such second component surface as the first surface is lowered in temperature causing it to forcefully engage such second surface.

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We claim:

1. A hand-held hammer comprising:

an elongated handle having two ends;

a tool head attached to a first handle end, the head comprising titanium or titanium alloy; and

the head having a striking surface, the striking surface being harder than the titanium or titanium alloy of the head.

2. A hand-held hammer of claim 1 wherein the striking surface is knurled.

3. A hand-held hammer of claim 1 wherein the striking surface is steel.

4. A hand-held hammer of claim 3 wherein the striking surface is knurled.

5. A hand-held hammer of claim 3 wherein the steel is a hardenable medium-carbon, low-alloy steel.

6. A hand-held hammer of claim 5 wherein the medium-carbon, low-alloy steel is 4140 steel.

7. A hand-held hammer of claim 1 wherein the steel is a stainless steel for corrosion resistance.

8. A hand-held hammer of claim 7 wherein the stainless steel is a high-strength, high-hardness steel.

9. A hand-held hammer of claim 1 wherein the head is made of a titanium alloy comprising titanium, aluminum, and vanadium.

10. A hand-held hammer of claim 9 wherein the aluminum content is in the range of about 2.5%–6.75% and the vanadium content is in the range of about 2%–4.5%.

11. A hand-held hammer of claim 9 wherein the titanium alloy is about 90% titanium, 6% aluminum, and 4% vanadium.

12. A striking tool comprising:

an elongated handle having two ends;

a tool head attached to a first handle end, the head comprising titanium or titanium alloy; and

the head having a striking surface, the striking surface being harder than the titanium or titanium alloy of the head;

wherein the striking surface is shrink fit onto the tool head.

13. A striking tool comprising:

an elongated handle having two ends;

a tool head attached to a first handle end, the head comprising titanium or titanium alloy; and

the head having a striking surface, the striking surface being harder than the titanium or titanium alloy of the head;

wherein the striking surface is threadably attached to the tool head.

14. A striking tool comprising:

an elongated handle having two ends;

a tool head attached to a first handle end, the head comprising titanium or titanium alloy;

the head having a steel striking surface, the striking surface being harder than the titanium or titanium alloy of the head;

wherein the striking surface has a sharpened working tip.

15. A hand-held hammer of claim 1 further comprising a void in the head for controlling the location of the center of gravity of the head.

16. A striking tool comprising:

an elongated handle having two ends;

a tool attached to a first handle end, the head comprising titanium or titanium alloy;

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the head having a steel striking surface, the striking surface being harder than the titanium or titanium alloy of the head;

wherein the striking surface is wedge-shaped; and

wherein the striking tool further comprises the head having a void for controlling the location of the center of gravity of the head, the void containing a portion of a high density material.

17. A hand-held hammer comprising:

an elongated handle having two ends;

a tool head attached to a first handle end, the head comprising titanium or titanium alloy; and

a striking surface attached to the head, the striking surface being made of a hardenable steel, the striking surface having a hardness of at least about 40 Rockwell C.

18. A hand-held hammer of claim 17 wherein the striking surface has a hardness of about 50 to 59 Rockwell C.

19. A hand-held hammer of claim 17 further comprising the head having a void for controlling the location of the center of gravity of the head.

20. A hand-held hammer of claim 19 wherein the void is located adjacent to the steel striking surface.

21. A striking tool comprising:

an elongated handle having two ends;

a tool head attached to a first handle end, the head comprising titanium or titanium alloy;

a striking surface attached to the head, the striking surface being made of a hardenable steel, the striking surface having a hardness of at least about 40 Rockwell C;

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wherein the head has a void for controlling the location of the center of gravity of the head, the void containing a portion of a high density material such as tungsten.

22. A hand-held hammer comprising:

an elongated handle having two ends;

a tool head for striking attached to a first handle end, the head comprising titanium or titanium alloy, the head having a body and a striking portion attached to the body, the striking portion having a striking surface,

wherein the striking portion and the striking surface are harder than the titanium or titanium alloy of the head.

23. A hand-held hammer of claim 22 wherein the striking portion and striking surface are made of steel.

24. A hand-held hammer of claim 23 wherein at least the striking surface has a hardness of at least 40 Rockwell C.

25. A hand-held hammer of claim 23 wherein at least the striking surface has a hardness of about 50 to 59 Rockwell C.

26. A hand-held hammer comprising:

an elongated handle having two ends;

a tool head attached to a first handle end, the head comprising titanium or titanium alloy;

the head having a striking surface, the striking surface being harder than the titanium or titanium alloy of the head; and

a void in the head for controlling the location of the center of gravity of the head.

* * * * *

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 6,536,308 B1
DATED : March 25, 2003
INVENTOR(S) : John K. Thorne et al.

Page 1 of 1

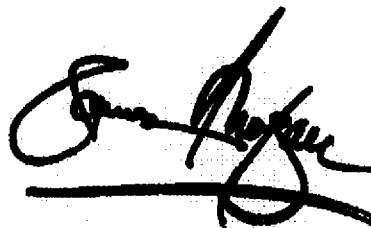
It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 4,

Line 19, replace "1" with -- 3 --.

Signed and Sealed this

Eighth Day of July, 2003

A handwritten signature in black ink, appearing to read "James E. Rogan", written over a horizontal line.

JAMES E. ROGAN

Director of the United States Patent and Trademark Office

PLAINTIFF'S EXHIBIT 3

U.S. Patent No.
6,923,432

In The Case Of

Tim Barrett, Individually and On Behalf of All Others Similarly Situated,

v.

Milwaukee Electric Tool, Inc., d/b/a Stiletto Tools, Inc.

KAZEROUNI LAW GROUP, APC
245 FISCHER AVENUE, UNIT D1, COSTA MESA, CA 92626
(800) 400-6808

US006923432B1

(12) **United States Patent**
Martinez

(10) **Patent No.:** **US 6,923,432 B1**
(45) **Date of Patent:** **Aug. 2, 2005**

(54) **SIDE NAIL PULLER**

(76) **Inventor:** **Mark Martinez**, 174 E. Broadway,
Atwater, CA (US) 95301

(*) **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.:** **10/898,877**

(22) **Filed:** **Jul. 26, 2004**

(51) **Int. Cl.⁷** **B25C 11/00**

(52) **U.S. Cl.** **254/26 R; 254/25; 81/20**

(58) **Field of Search** **254/26 R, 26 E,**
254/19, 20; 81/20, 19, 23

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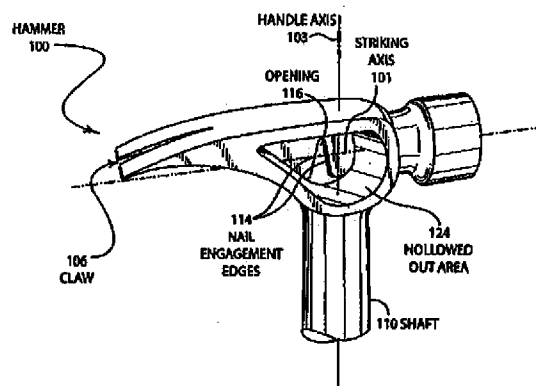
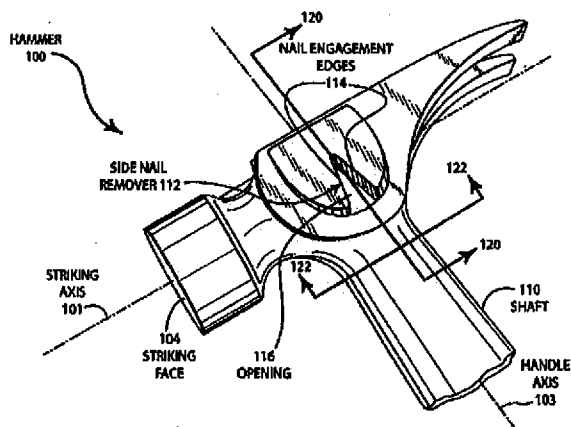
Primary Examiner—Lee D. Wilson

(74) *Attorney, Agent, or Firm*—Russell S. Krajec; Krajec
Patent Offices, LLC

(57) **ABSTRACT**

A nail puller mounted on the side of the head of a hammer. The nail puller may be incorporated into a metal hammer head and consist of a groove mounted substantially in line with the handle of the hammer. The nail puller consists of a V-shaped opening suitable for engaging various sizes of nail heads or shanks. The nail puller is located on the side of the hammer, such that the nail is engaged when the hammer is laid nearly parallel to the work surface. The position of the nail puller gives the user nearly 180 degrees of rotation to remove the nail.

16 Claims, 6 Drawing Sheets

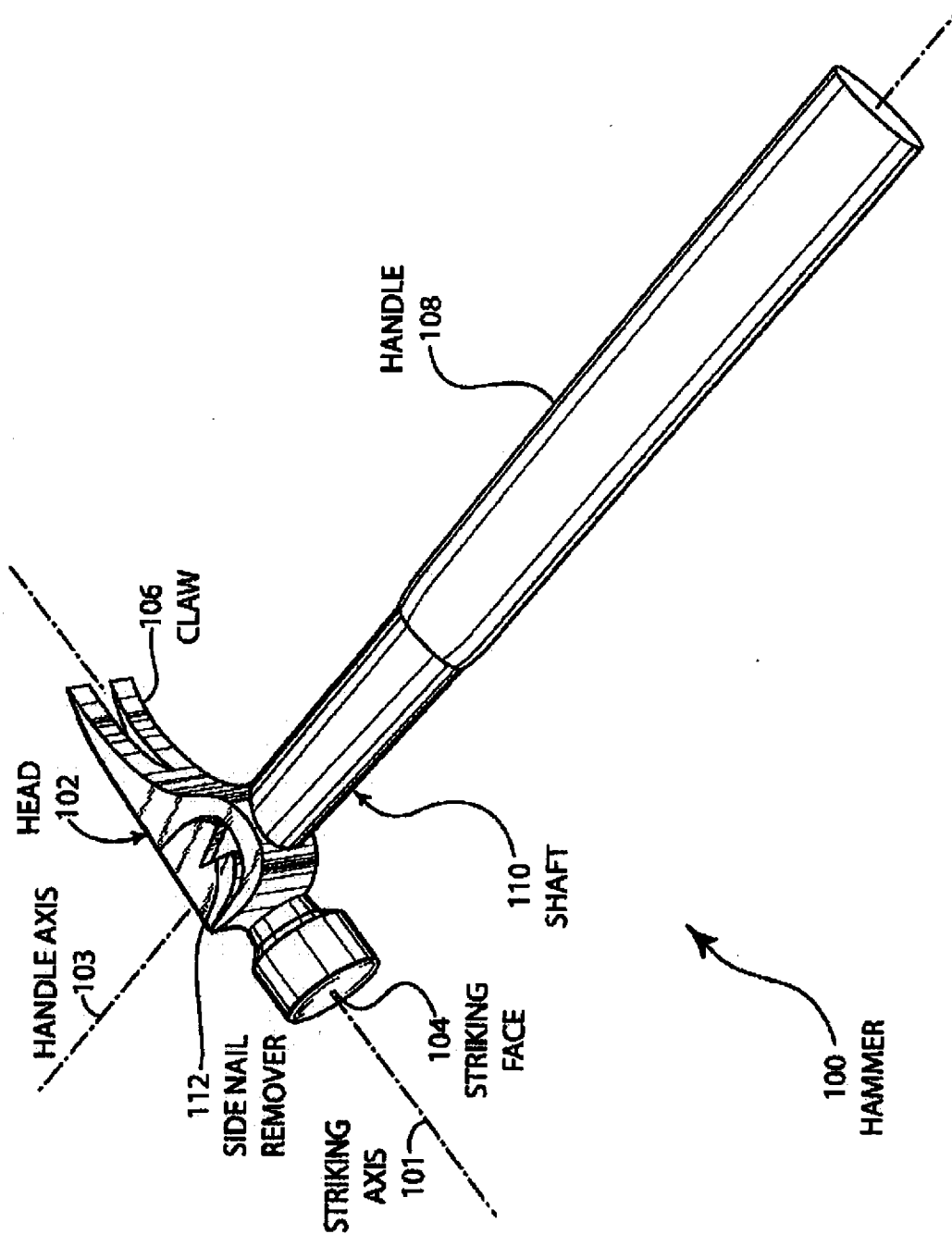


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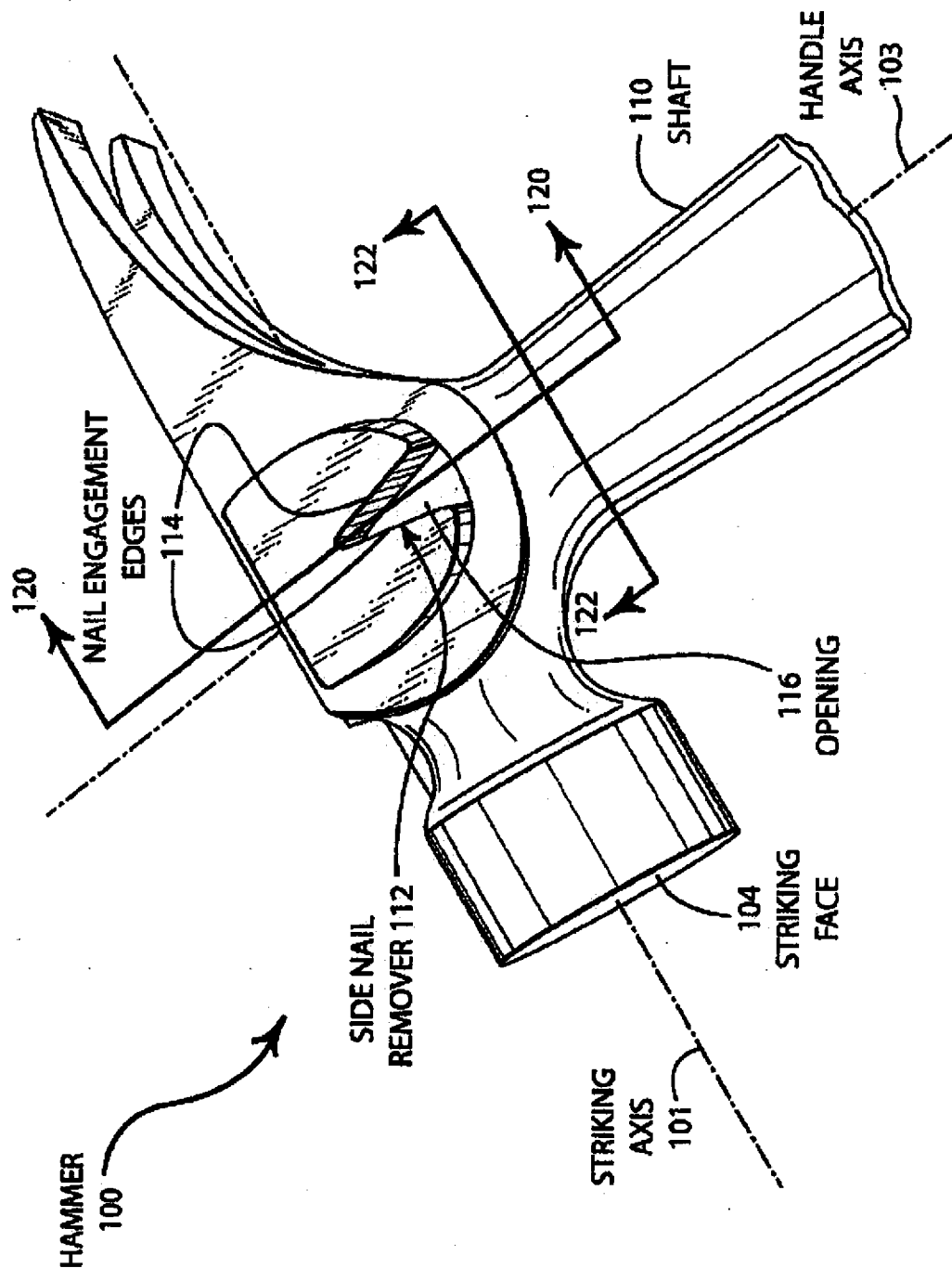


FIGURE 2

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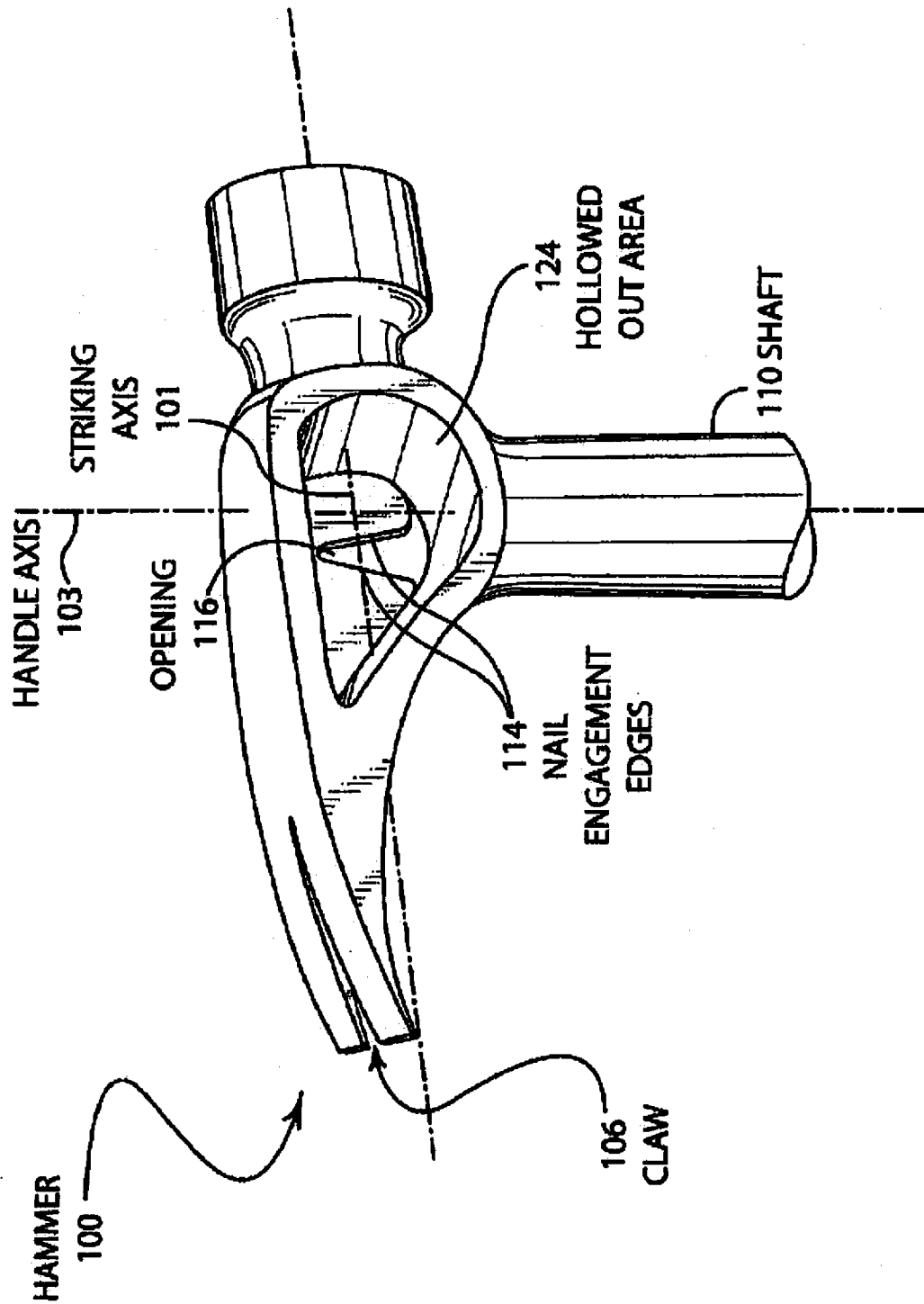


FIGURE 3

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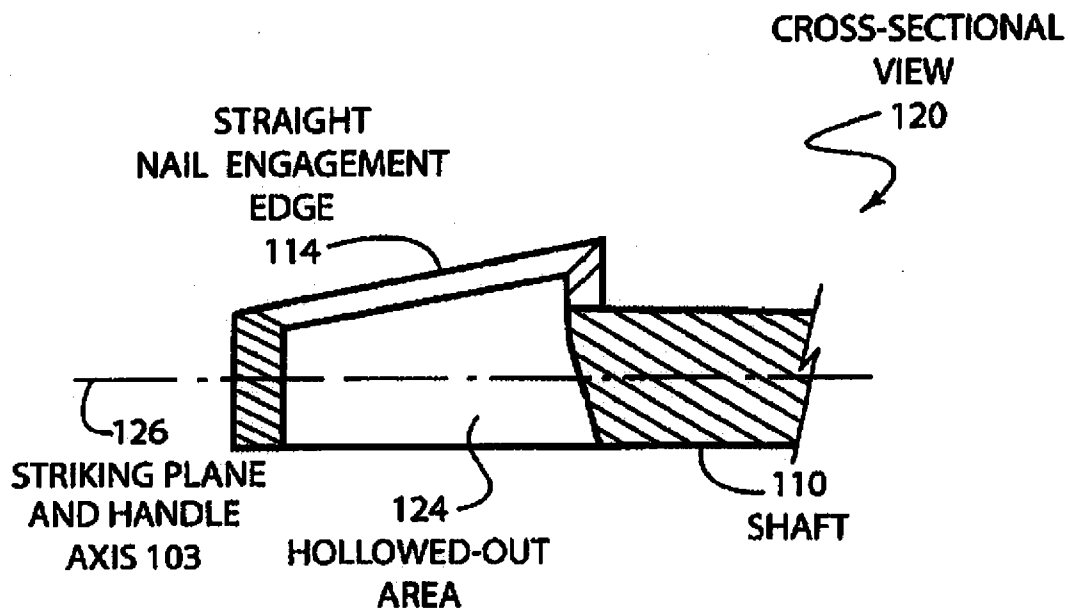


FIGURE 4A

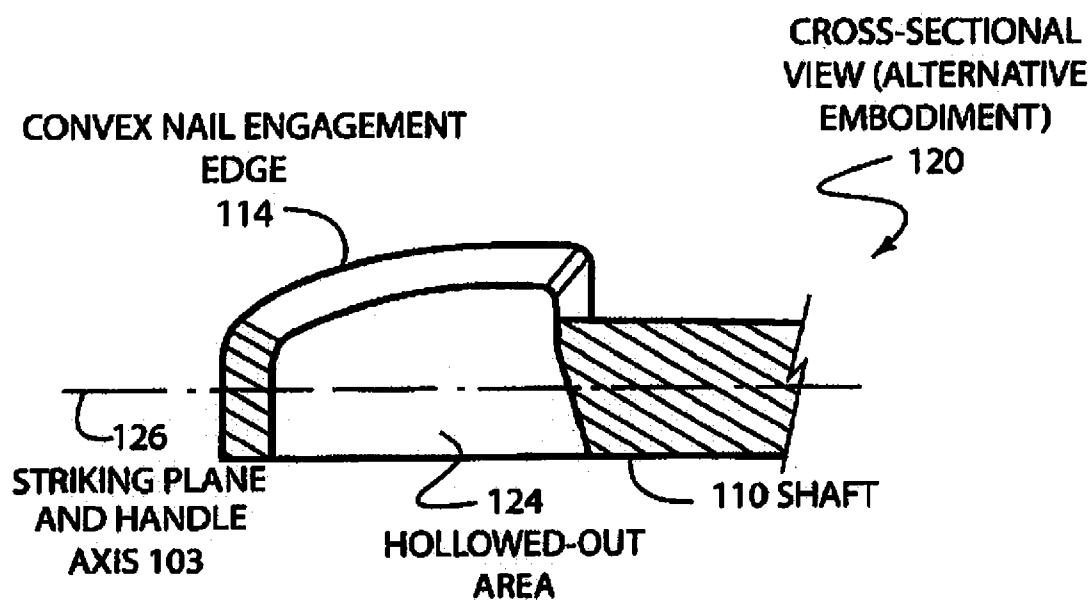


FIGURE 4B

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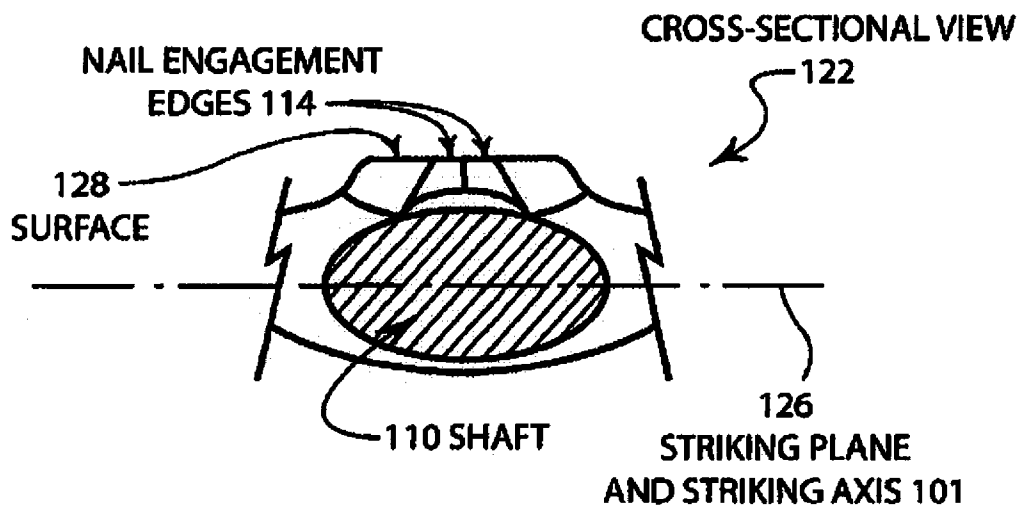


FIGURE 5A

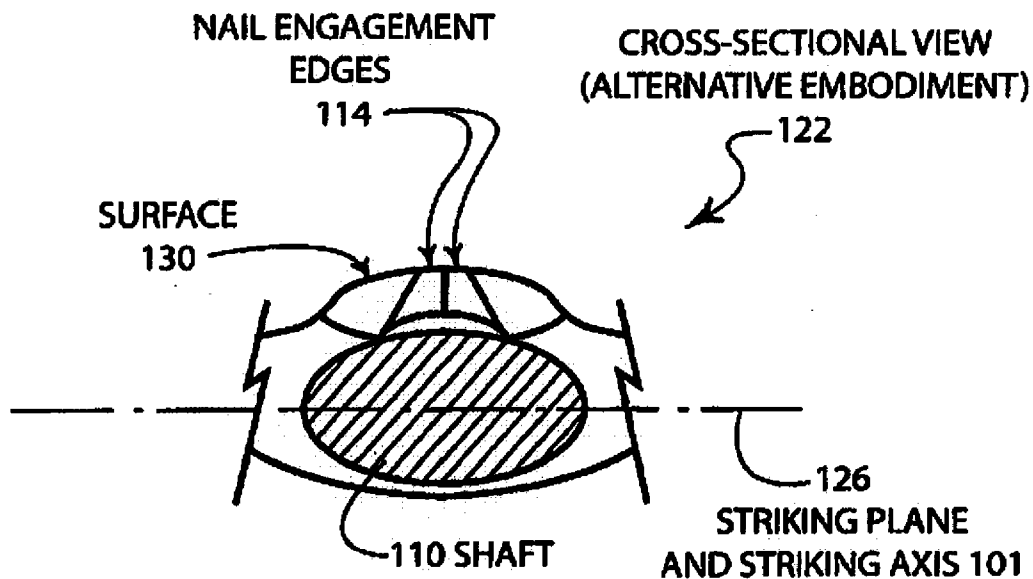


FIGURE 5B

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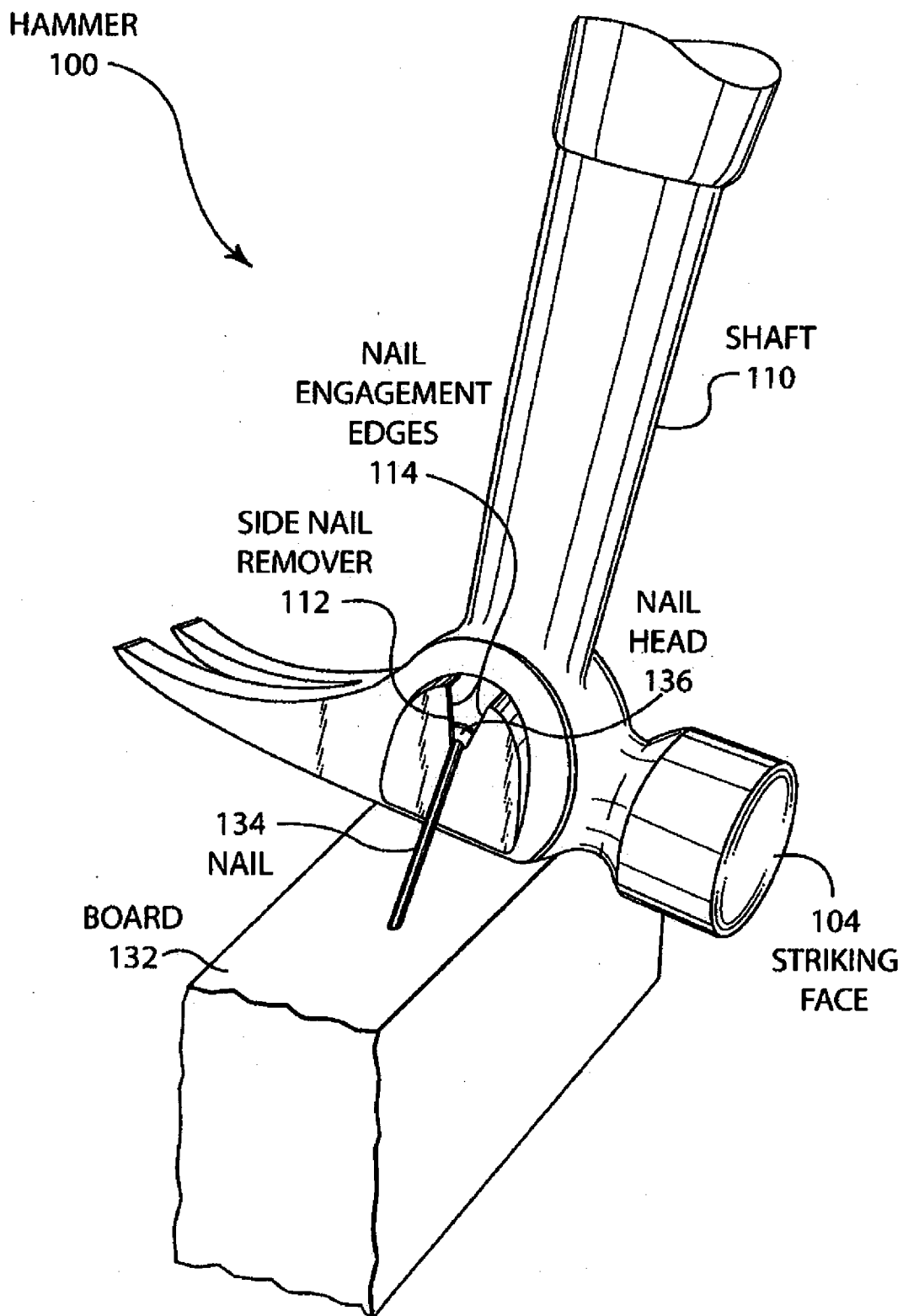


FIGURE 6

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SIDE NAIL PULLER

BACKGROUND OF THE INVENTION

a. Field of the Invention

The present invention pertains generally to nail pulling devices and specifically to nail pulling devices incorporated into a hammer or other striking tool.

b. Description of the Background

A hammer is the most ubiquitous tool of the carpentry trade. Carpenters use hammers to both drive and remove nails. Carpenters are also known for their creativity and ability to use tools in various ways to solve problems as they come up. For example, even though a traditional claw hammer may have a conventional striking face, a carpenter may use the side of the hammer to drive a nail or strike a tool in specific instances. The more options a carpenter has for using a tool, the more the tool will be used.

Removing nails is a task for which a carpenter may use several different tools, including a claw hammer, a "cat's paw" nail remover, various pry bars, and other tools. Each tool is suited to specific applications depending on the access to the nail and force required to remove the nail from the wood. For example, a nail positioned near the end of a board may be difficult to remove because there may not be enough room at the end of the board for a conventional claw hammer.

Further, the leverage of a conventional claw hammer may be insufficient to remove difficult nails, such as long nails in hardwoods. In such a case, the carpenter may resort to a second tool, such as a pry bar or cat's paw nail remover.

It would therefore be advantageous to provide a device and method whereby a conventional hammer may be used to remove stubborn nails in certain positions that were otherwise difficult or impossible. It would be further advantageous if such a system and method were simple to manufacture and very durable.

SUMMARY OF THE INVENTION

The present invention overcomes the disadvantages and limitations of previous solutions by providing a device and method for removing nails by using a nail puller mounted on the side of the head of a hammer. The nail puller may be incorporated into a metal hammer head and consist of a groove mounted substantially in line with the handle of the hammer. The nail puller consists of a V-shaped opening suitable for engaging various sizes of nail heads or shanks.

The nail puller is located on the side of the hammer, such that the nail is engaged when the hammer is laid nearly parallel to the work surface. The position of the nail puller gives the user nearly 180 degrees of rotation to remove the nail.

An embodiment of the present invention may include a striking tool comprising: a handle; a unitized head comprising: at least one striking end having a striking axis; a handle shaft having an end and a handle axis; a striking plane defined by the plane of movement in which the striking end strikes an object, the striking plane being coplanar with the striking axis and the handle axis; two diverging nail engagement edges located proximal to the junction of the striking axis and the handle axis and offset from and substantially parallel to the striking plane, the nail engagement edges diverging in the direction of the handle end.

Another embodiment of the present invention may include a striking tool comprising: a handle having a handle axis; a head having a head axis substantially coplanar with

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the handle axis; a striking plane defined by the coplanar handle axis and the head axis; and a single web proximally located to the junction of the handle axis and the head axis, the web offset from the striking plane, the web having a divergent opening oriented substantially in the direction of the handle axis, the opening diverging in the direction from the head axis toward the handle.

The advantages of the present invention include that nails may be removed using a hammer in a simple and intuitive manner. The nail puller may be incorporated into hammer designs without adding significant cost or complexity.

BRIEF DESCRIPTION OF THE DRAWINGS

In the drawings,

FIG. 1 is a perspective illustration of an embodiment of the present invention showing a hammer.

FIG. 2 is a perspective illustration of a close up view of the embodiment of FIG. 1.

FIG. 3 is a perspective illustration of a close up view of the back side of the embodiment of FIG. 1.

FIG. 4A is a cross-sectional illustration of a first embodiment of a cross-section 120 from FIG. 1.

FIG. 4B is a cross-sectional illustration of a second embodiment of a cross-section 120 from FIG. 1.

FIG. 5A is a cross-sectional illustration of a first embodiment of a cross-section 122 from FIG. 1.

FIG. 5B is a cross-sectional illustration of a second embodiment of a cross-section 122 from FIG. 1.

FIG. 6 is a perspective illustration of an embodiment of a hammer in the process of removing a nail from a board.

DETAILED DESCRIPTION OF THE INVENTION

FIG. 1 illustrates an embodiment 100 of the present invention showing a hammer 100 having a head 102 that has a striking face 104 and claw 106. The handle 108 extends from the head 102. The handle shaft 110 is integral to the head 102. The head 102 contains a side nail remover 112. The striking axis 101 and handle axis 103 are shown approximately perpendicular to the striking face 104 and approximately parallel to the shaft 110, respectively.

FIG. 2 illustrates a closer view of embodiment 100 of a hammer. The striking face 104, shaft 110, and side nail puller 112 are shown.

The nail puller 112 is comprised of two nail engagement edges 114 and the opening 116. The opening 116 is designed to allow the head of a nail fit inside the opening, and the tapered configuration of the nail engagement edges 114 allows the hammer 100 to be slid over the nail until the shank of the nail is grasped by the edges 114. Once the nail is engaged, the hammer 100 may be rotated about an axis approximately perpendicular to the striking face 104 to remove the nail.

The nail puller 112 is fashioned by casting or forging the opening 116 into the hammer 100. The embodiment 100 is a unitized cast hammer wherein the shaft 110 is integral to the head 102.

FIG. 3 illustrates a close up view of the back side of the embodiment 100 of a hammer. The claw 106 and shaft 110 are shown. The nail engagement edges 114 and the opening 116 are also illustrated. Because the shaft 110 and head 102 are a unitized piece of metal, a hollowed out area 124 can be placed behind the side nail puller 112.

In embodiment 100, the side nail puller 112 may be manufactured from a single web that spans the area between

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the striking face 104 and the claw 106. In embodiments with a separate fiberglass or wooden handle, the area shown as the hollowed out area 124 would normally be the junction between the handle and the head of a hammer.

The hollowed out area 124 allows the side nail puller 112 to engage a nail at any point along its shank. For example, if a nail has a crooked head or bent shank, the head of the nail may be fit through the wide end of the opening 116 and the side nail puller 112 may be slid until the nail engagement edges 114 firmly grip the nail shank near the board from which it is to be removed. The bent head and crooked portion of the nail may protrude into the hollow area 124 without compromising the effectiveness of the nail puller.

Further, because the handle and head are unitized, the side nail puller 112 may be manufactured as a cast or forged feature, thus making the nail puller 112 a very low cost addition to a standard unitized head hammer. In some embodiments, the side nail puller 112 may be manufactured by machining, punching, or other metal removal process. In still other embodiments, the side nail puller 112 may be mechanically attached to the head 102 by welding, brazing, fastening, or other means.

The embodiment 100 may be manufactured of any suitable material, preferably metallic. For example, embodiments of titanium, steel, and various alloys are possible. Further, composite materials such as reinforced plastics or thermoset materials are envisioned. In embodiments of composite materials, the side nail puller 112 may be a metallic insert that is molded or attached to a composite head.

Striking tools other than a hammer may be used with the side nail puller 112. For example, a hatchet, ball peen hammer, sledge, or other striking tool may have a side nail puller 112 fashioned in a similar manner.

The usefulness of the side nail puller 112 is that it may be used to remove nails in addition to other features on the hammer. For example, in some circumstances, the claw 106 may not have enough clearance nearby the nail on which to rest the fulcrum portion of the head. Similarly, the distance between the pulling point of the claw 106 and the pivot or fulcrum point of the head may be longer than the distance between the pulling point and fulcrum point of the side nail puller 112. In such a case, the pulling force required on the handle 108 to remove the nail is substantially less for the side nail puller 112 than with the claw 106.

Various head geometries and shapes may be used to increase and decrease the leverage exerted on the handle 108 when using the side nail puller 112. For example, by rounding over the top surfaces of the hammer head, the nail pulling action of the side nail puller is smoother than when the head has more of a squared top.

FIG. 4A illustrates a first embodiment of a cross-sectional view 120 from FIG. 1. The shaft 110 is shown in cross-section along with the striking plane 126. The nail engagement edge 114 is shown as well as the hollowed out area 124.

The striking plane 126 is the approximate center plane of the striking tool and the plane in which the tool is swung to strike an object. The nail engagement edge 114 is shown slightly canted upward in the illustration, but generally parallel to the striking plane 126. In some embodiments, the nail engagement edge 114 may be very close to parallel to the striking plane 126.

FIG. 4B illustrates a second embodiment of a cross-sectional view 120 from FIG. 1. The shaft 110 is shown in

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cross-section along with the striking plane 126. The nail engagement edge 114 is also shown as well as the hollowed out area 124.

The nail engagement edge 114 is curved upward in a convex manner, when viewed from the working surface. The convex shape of nail engagement edge 114 may allow the side nail puller 112 to dig into a substrate, such as wood, and engage a nail head. The shape may be a similar design as for a 'cat's paw' or similar nail extracting tools.

FIG. 5A illustrates a first embodiment of a cross-sectional view 122 from FIG. 1. The shaft 110 is shown in cross-section along with the striking plane 126. The nail engagement edges 114 are formed by the surface 128, which is substantially flat.

FIG. 5B illustrates a second embodiment of a cross-sectional view 122 from FIG. 1. The shaft 110 is shown in cross-section along with the striking plane 126. The nail engagement edges 114 are formed by the surface 130, which is substantially curved in a convex manner.

The surface 130 and nail engagement edges 114 may be formed in a convex manner similar to that of other nail extracting tools, such as a 'cat's paw.' The curvature of the surface 130 may be designed to dig into a substrate, such as wood, and engage a nail to be extracted. The particular angle of the nail engagement edges 114 that form the opening 116 and the curvature (if any) of the surface 130 may be varied to give more or less ease of engagement of the nail and structural integrity of the side nail puller 112.

FIG. 6 illustrates an embodiment 100 of a hammer in the process of removing a nail 134 from board 132. The hammer 100 includes a striking face 104, a shaft 110, and the side nail puller 112. The nail engagement edges 114 are holding the head of the nail 136.

When using the side nail puller 112, the hammer is laid almost parallel to the board 132 to engage the nail 134. This gives the user almost 180 degrees of rotation to remove the nail. With the embodiment 100 shown, a 16d nail may be removed completely with one movement.

The leverage of the handle is magnified because the fulcrum point when using the side nail puller 112 is usually close to the nail 134. As those skilled in the art will appreciate, by having a larger head on the hammer, a side nail puller 112 may have a longer stroke by which a nail is removed, but may have less leverage by which to remove it.

The foregoing description of the invention has been presented for purposes of illustration and description. It is not intended to be exhaustive or to limit the invention to the precise form disclosed, and other modifications and variations may be possible in light of the above teachings. The embodiment was chosen and described in order to best explain the principles of the invention and its practical application to thereby enable others skilled in the art to best utilize the invention in various embodiments and various modifications as are suited to the particular use contemplated. It is intended that the appended claims be construed to include other alternative embodiments of the invention except insofar as limited by the prior art.

What is claimed is:

1. A striking tool comprising:

a handle;

a unitized head comprising:

at least one striking face having a striking axis substantially perpendicular to said striking face;

a handle shaft having an end and a handle axis substantially parallel to said handle shaft;

a hollowed out through portion located proximal to the junction of said striking axis and said handle axis which

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is covered at least on one side by a side nail puller having two diverging nail engagement edges.

2. The striking tool of claim 1 where in said nail engagement edges diverge in the direction of said handle end.

3. The striking tool of claim 1 wherein said striking end 5 face comprises a substantially fiat striking surface.

4. The striking tool of claim 1 further comprising a nail removal claw oriented substantially symmetrical about said striking plane.

5. The striking tool of claim 1 wherein said nail engagement 10 edges are supported by a convexly curved web.

6. The striking tool of claim 1 wherein said nail engagement edges are convexly curved.

7. A striking tool comprising:

a handle shaft having a handle axis substantially parallel 15 thereto;

a head having a striking axis substantially coplanar with said handle axis and substantially perpendicular to a striking face; and

a hollowed out through portion of said head proximally 20 located to the junction of said handle axis and said striking axis which is covered by at least one side nail puller having a divergent opening oriented substantially in the direction of said handle axis;

wherein said head and said handle shaft are composed of 25 a single piece of material.

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8. The striking tool of claim 7 wherein said handle axis and said striking axis are substantially perpendicular.

9. The striking tool of claim 7 wherein said divergent opening is oriented substantially parallel to said handle axis.

10. The striking tool of claim 7 wherein said divergent opening is oriented substantially collinear to said handle axis and substantially parallel to said striking plane.

11. The striking tool of claim 7 wherein said handle comprises a metallic shaft.

12. The striking tool of claim 7 wherein said head comprises a substantially flat striking surface substantially perpendicular to said head axis.

13. The striking tool of claim 7 further comprising a nail removal claw oriented substantially symmetrical about said striking plane.

14. The striking tool of claim 7 wherein said divergent opening is supported by a substantially flat web offset from and substantially parallel to said striking plane.

15. The striking tool of claim 7 wherein said divergent opening is supported by a convexly curved web.

16. The striking tool of claim 7 wherein said divergent opening is convexly curved.

* * * * *

PLAINTIFF'S EXHIBIT 4

U.S. Patent No.
5,908,643

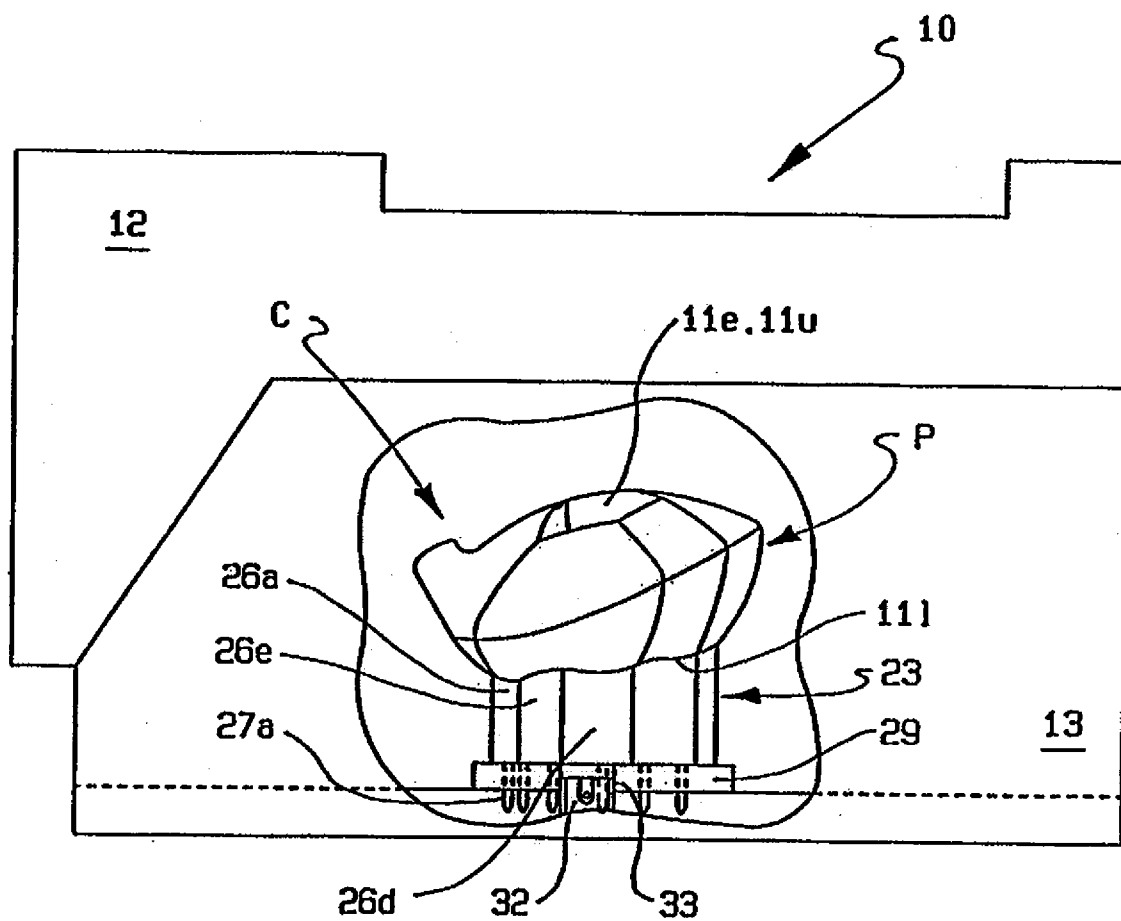
In The Case Of

Tim Barrett, Individually and On Behalf of All Others Similarly Situated,

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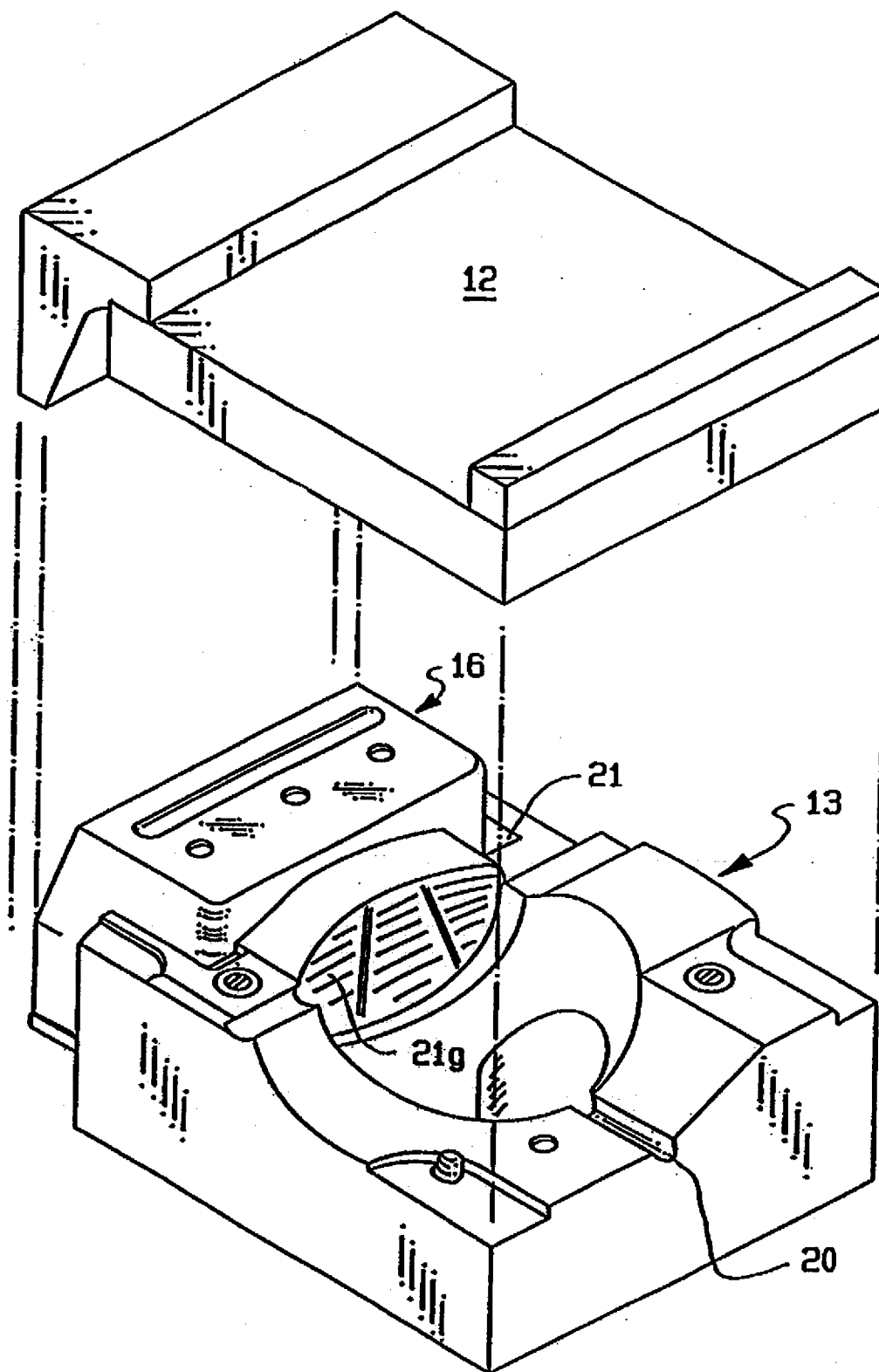


FIG. 2

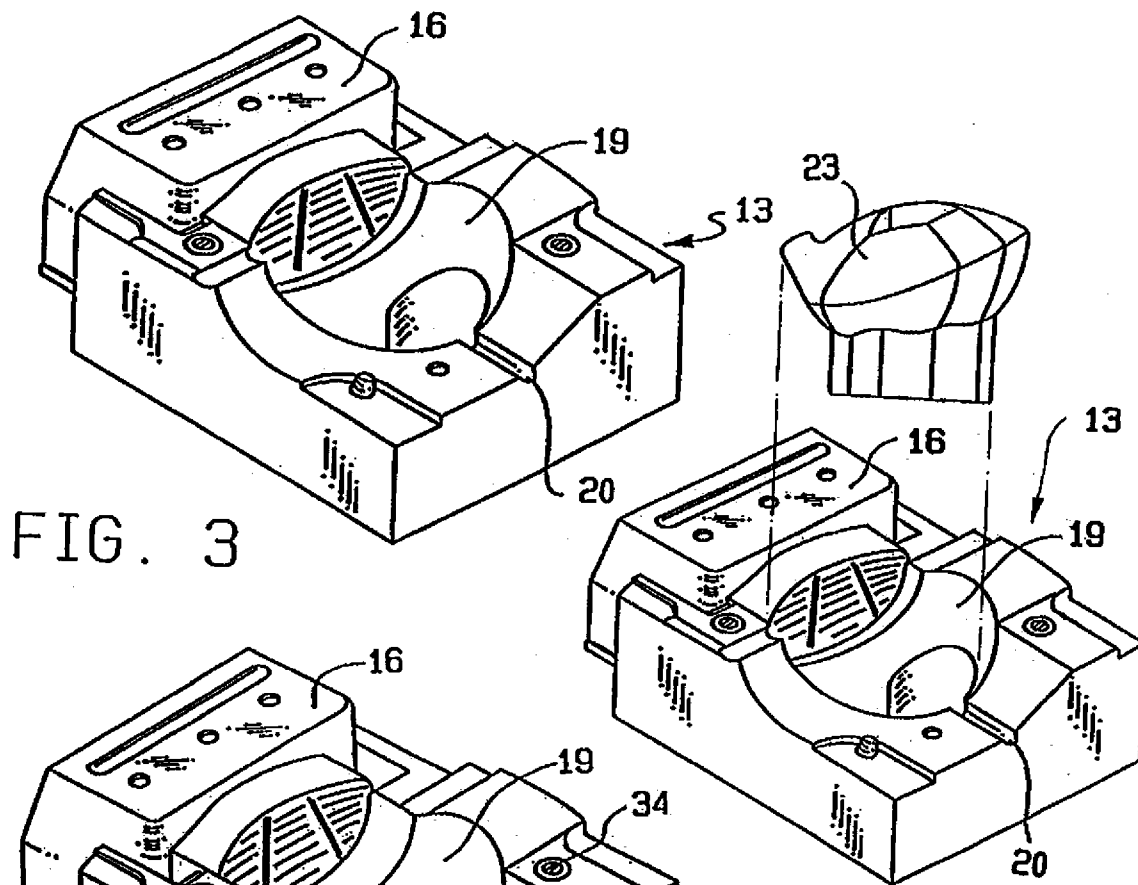


FIG. 3

FIG. 3b

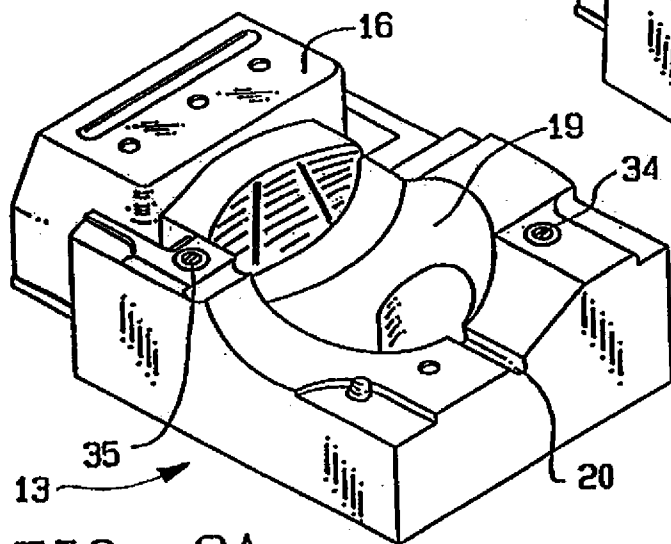


FIG. 3A

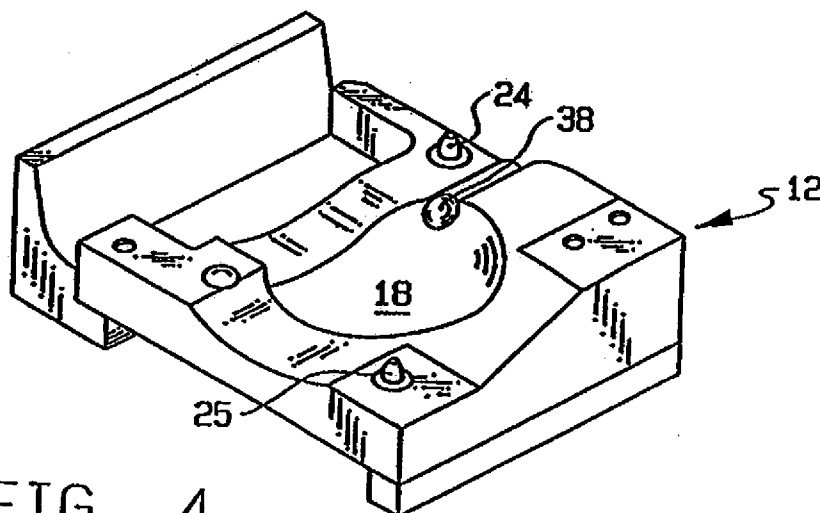


FIG. 4

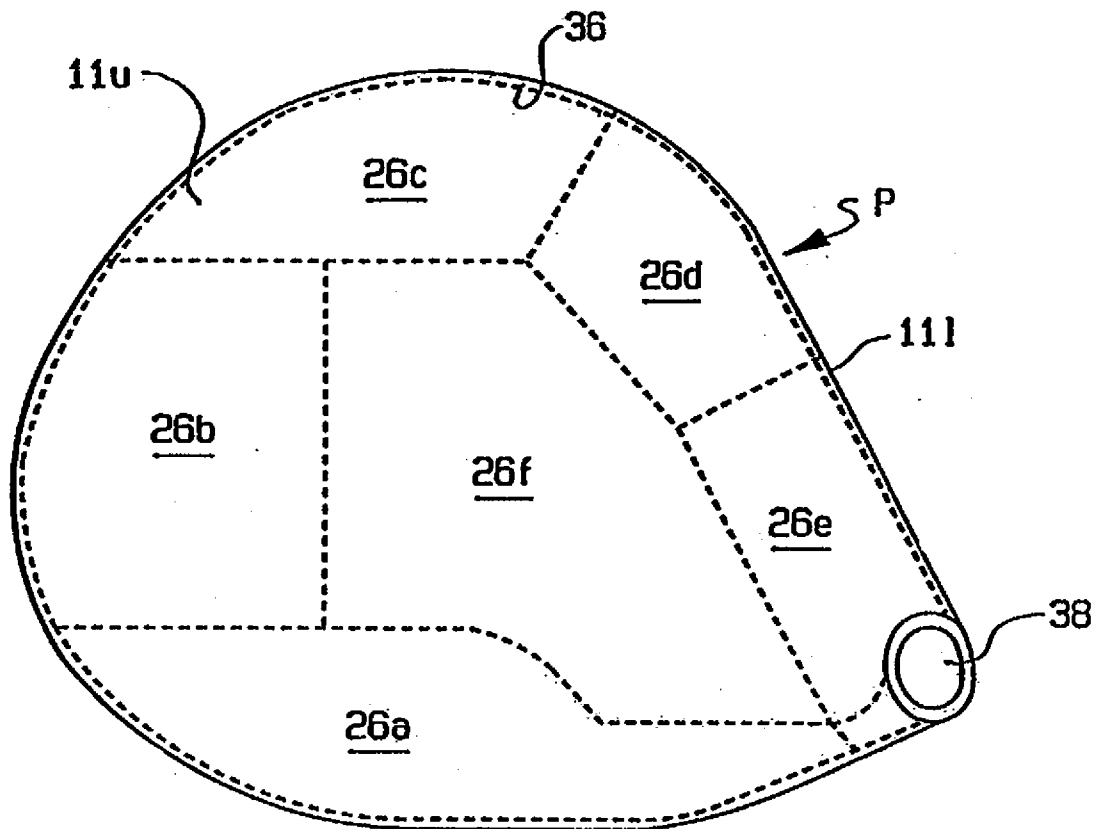


FIG. 5

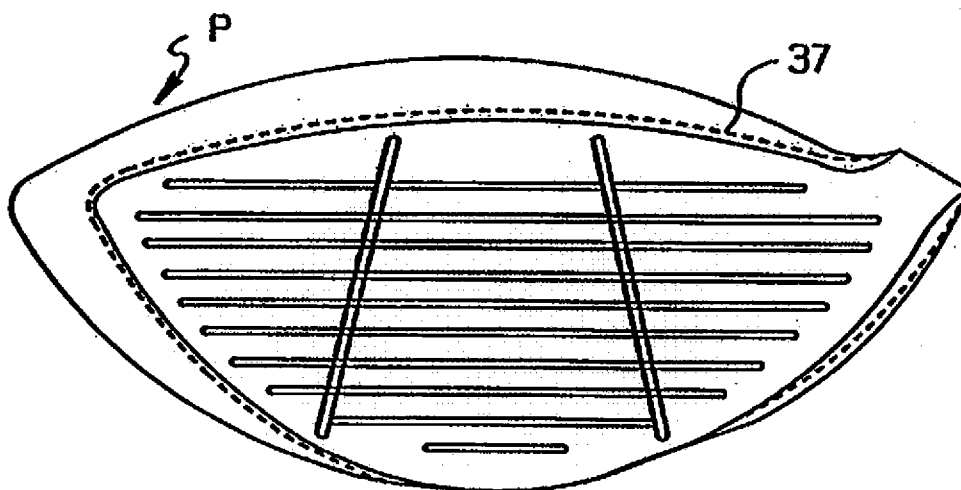


FIG. 6

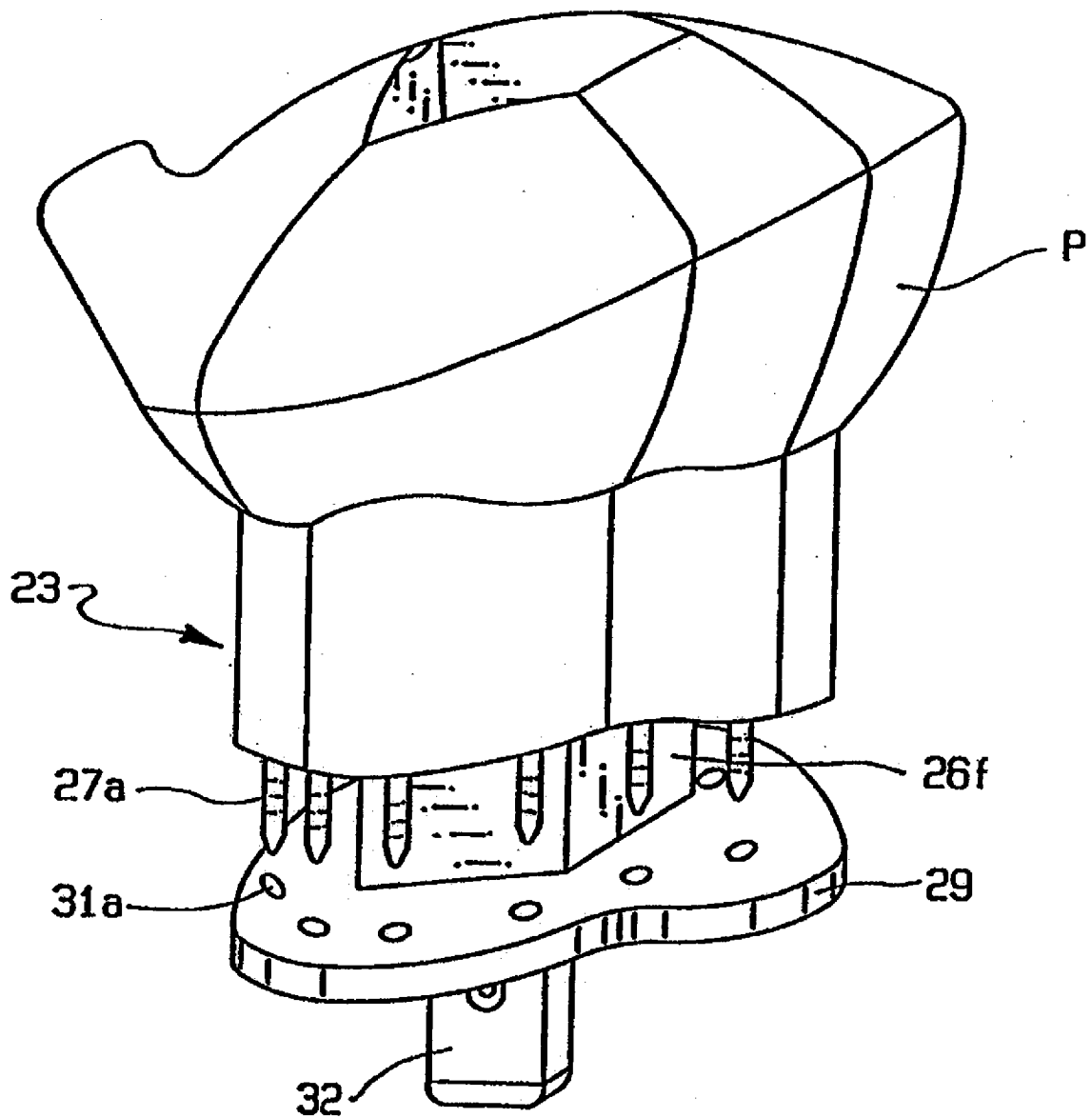


FIG. 7

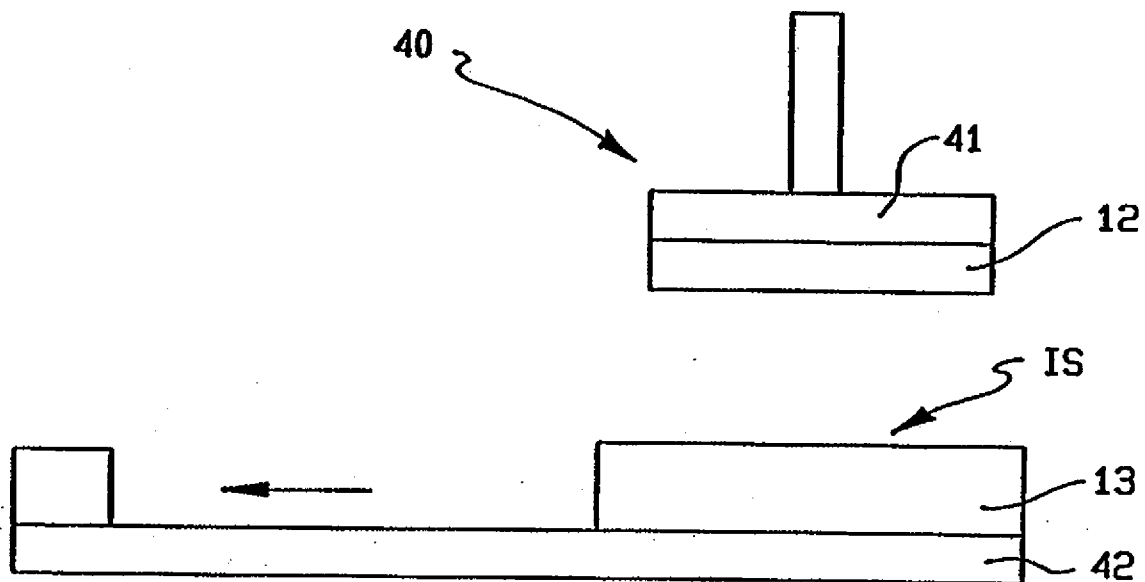


FIG. 8

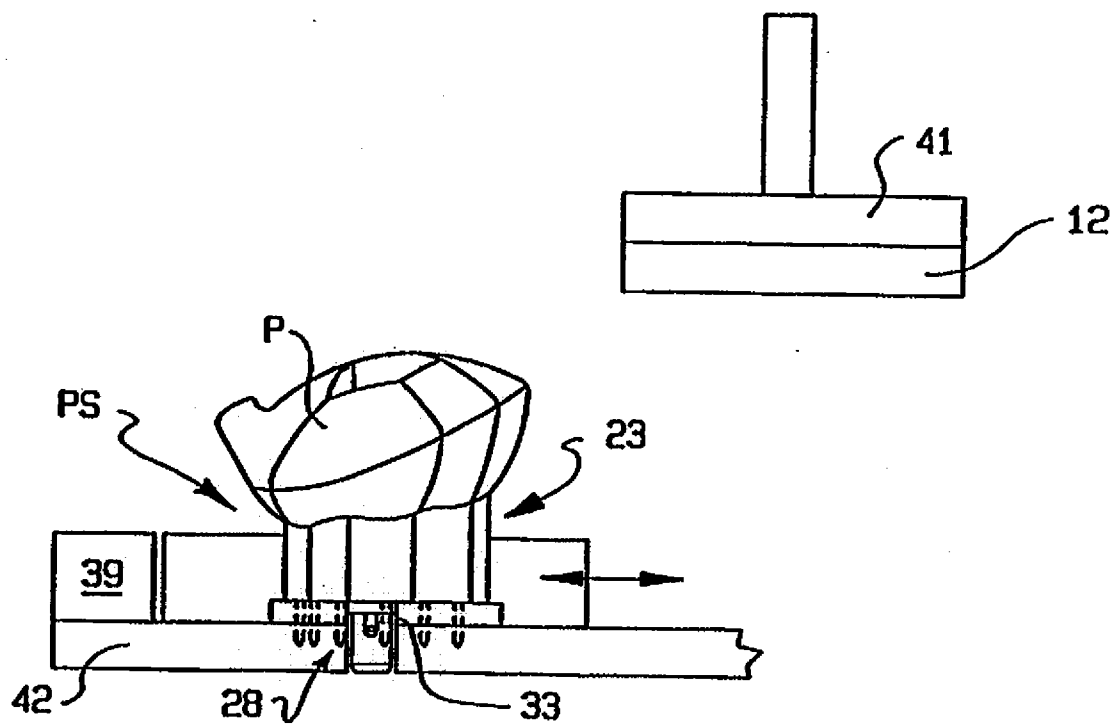


FIG. 9



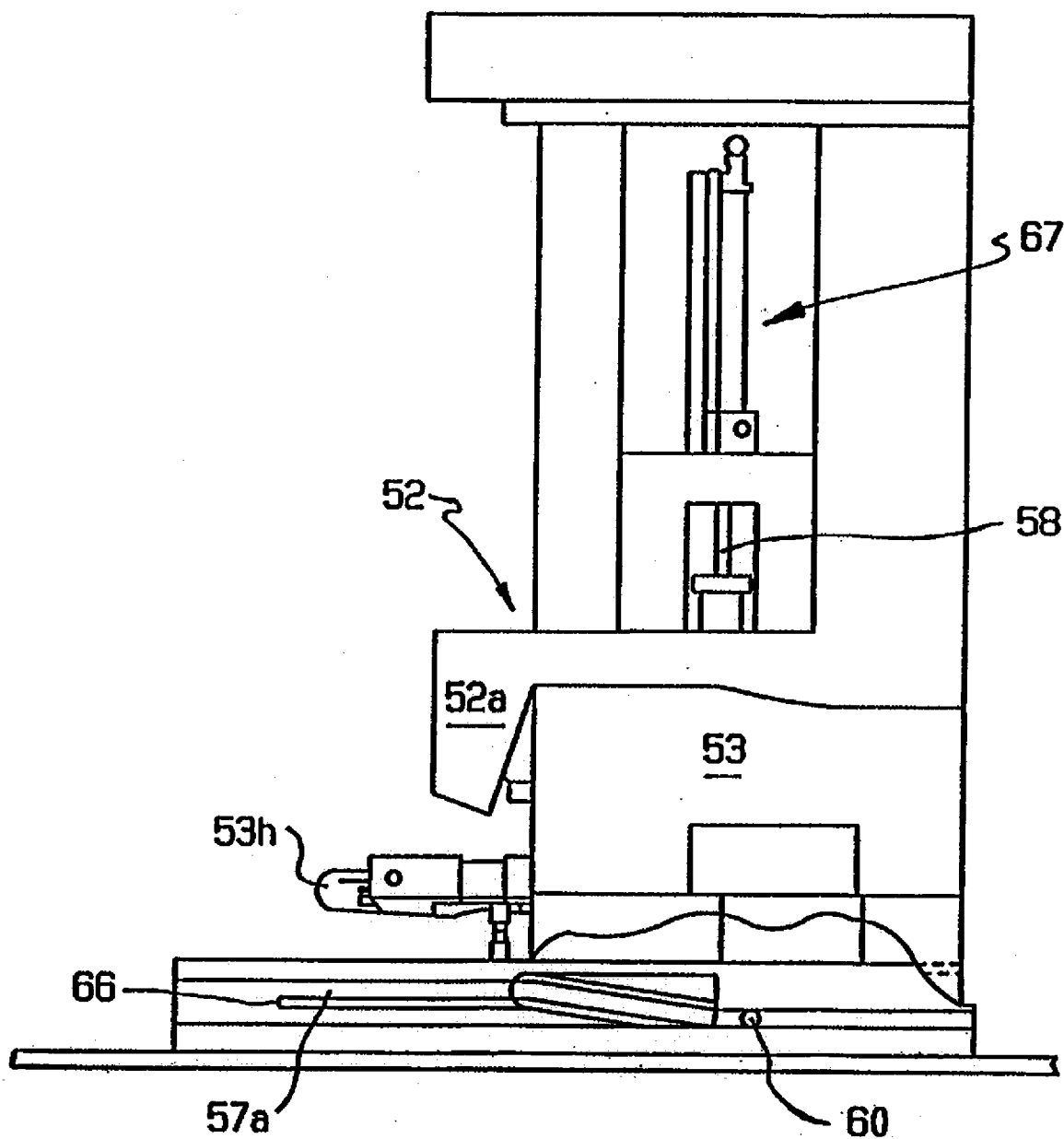


FIG. 11

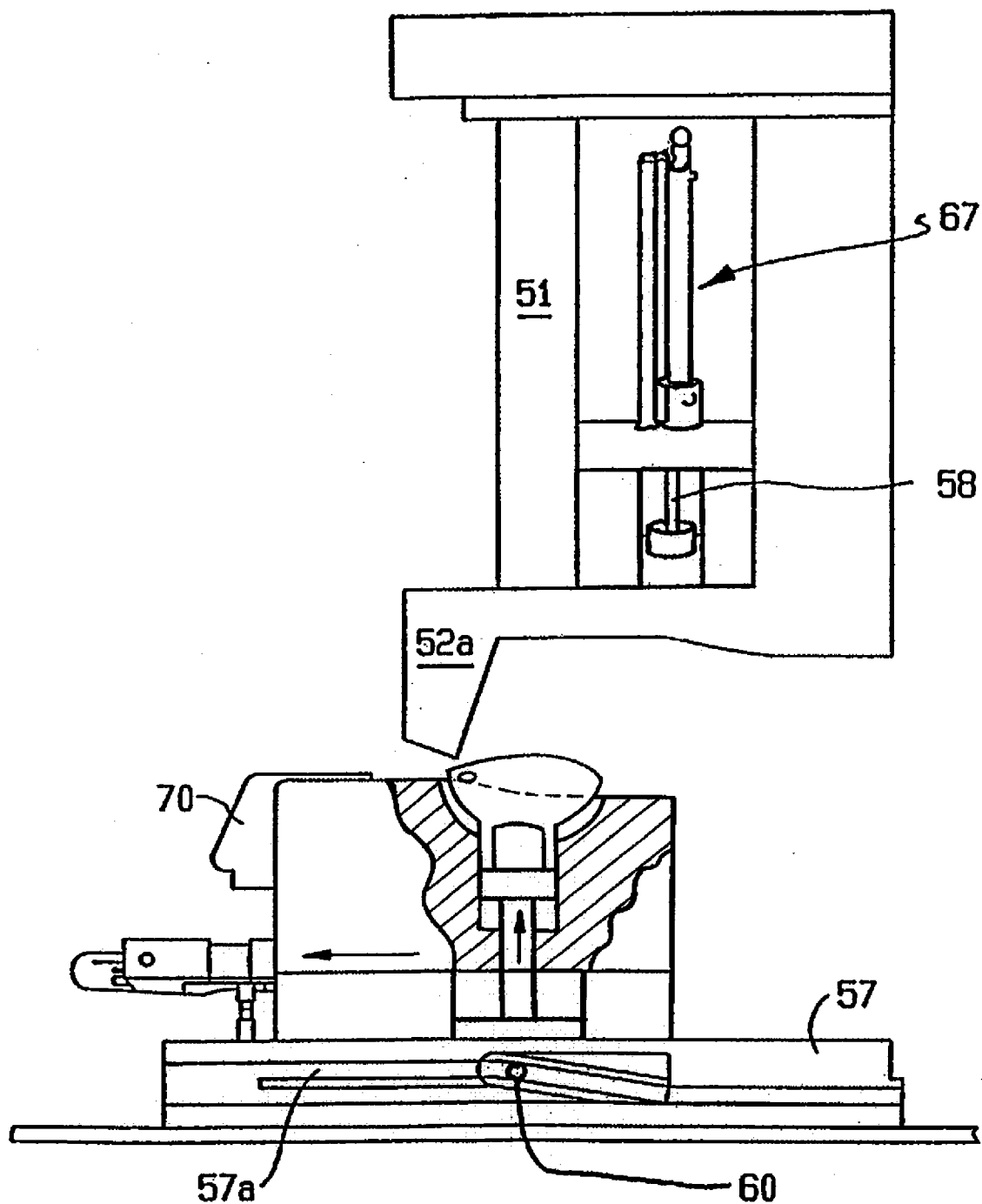


FIG. 12

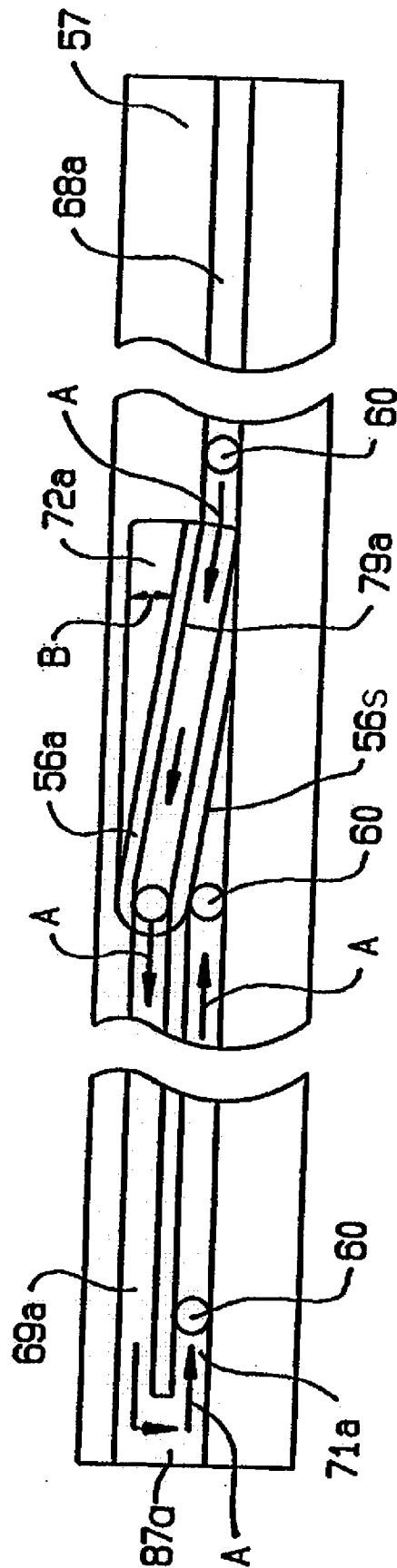


FIG. 12a

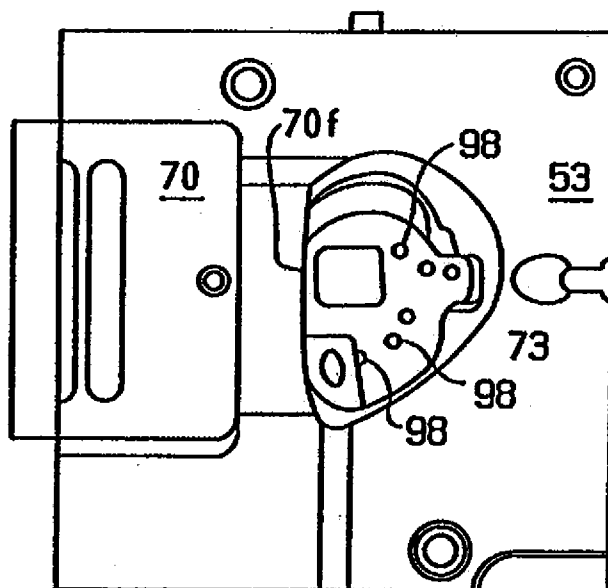


FIG. 13

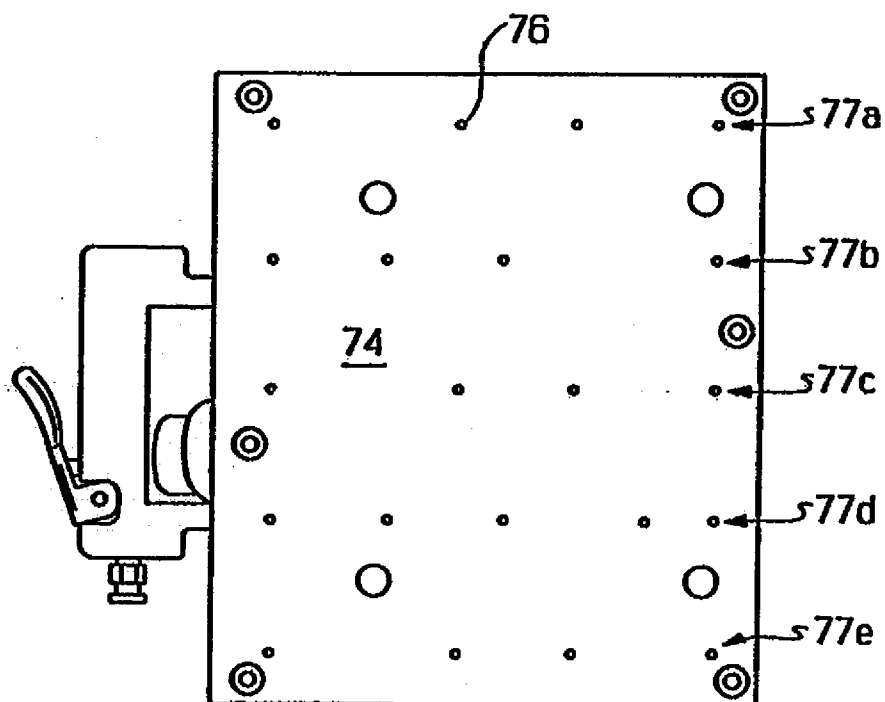


FIG. 14

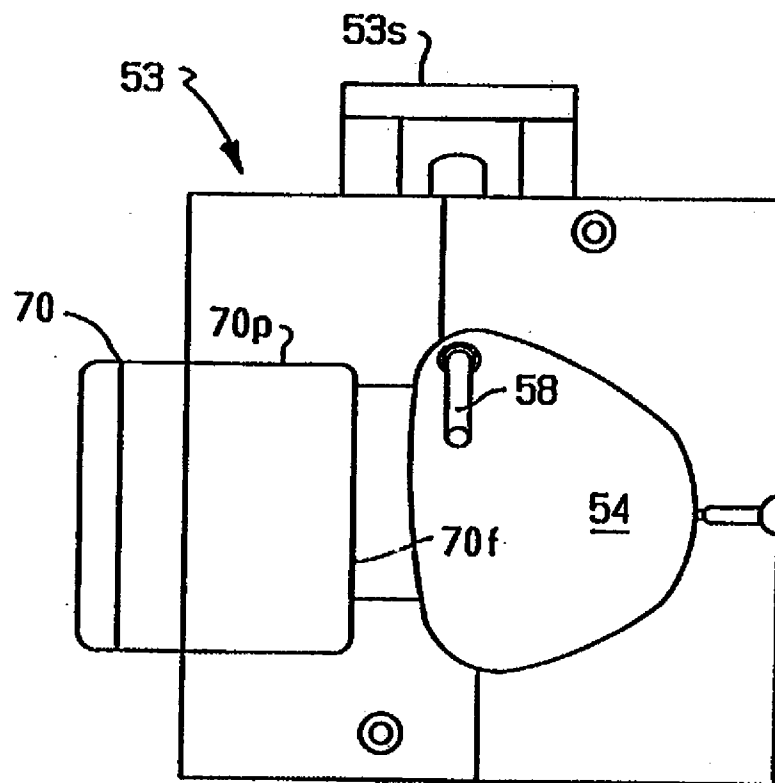


FIG. 15

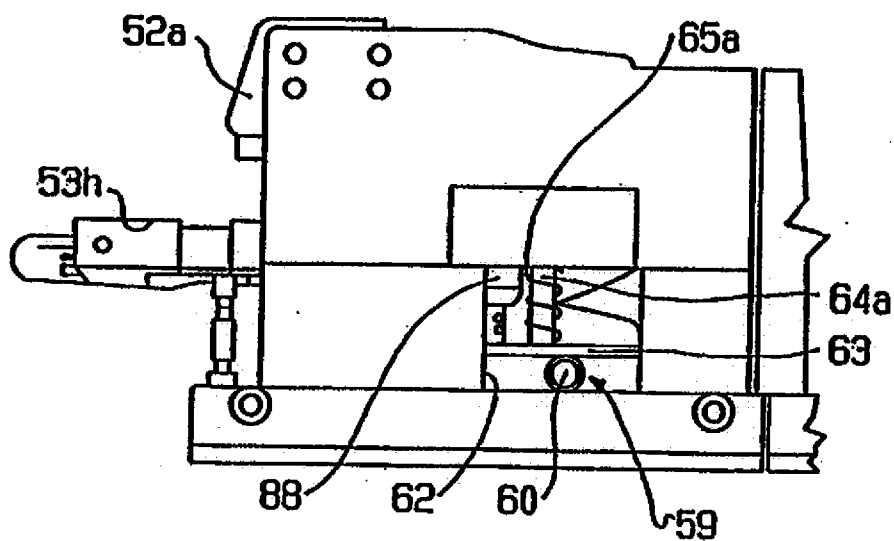
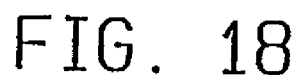
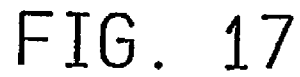


FIG. 16



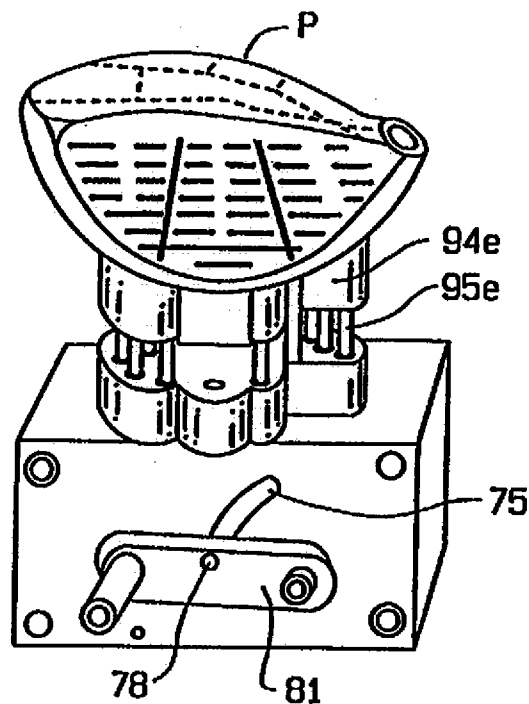


FIG 19

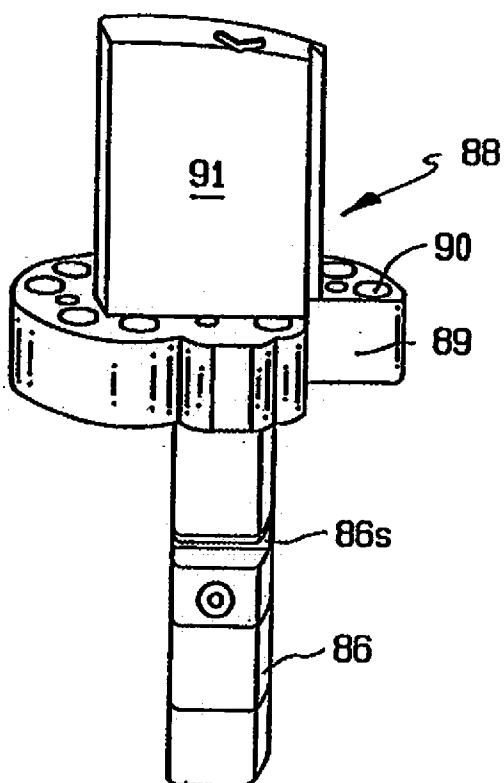


FIG. 20

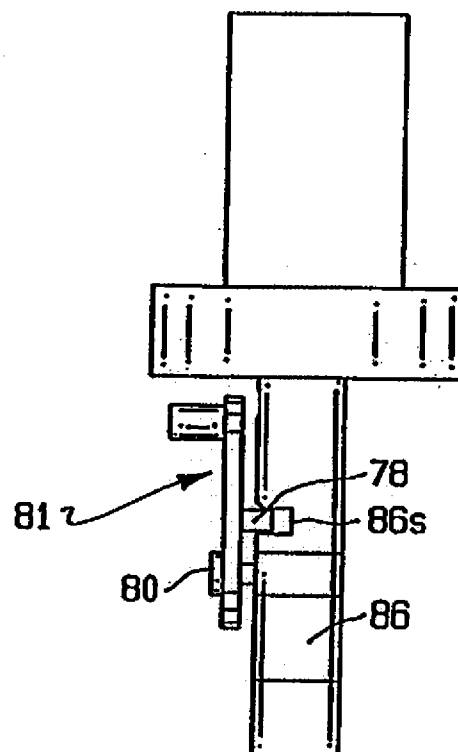


FIG. 20A

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INJECTION MOLD APPARATUS FOR PRODUCING A PATTERN

This application is a continuation-in-part of an application filed Jul. 10, 1997 entitled "Injection Mold For Producing A Pattern And Method of Mold Use", Ser. No. 08/891,435 now abandoned which in turn was a continuation of U.S. application Ser. No. 08/662,900 filed Jun. 12, 1996 of the same title now abandoned.

BACKGROUND OF THE INVENTION

Aluminum molds for making wax patterns have been in use for years. Combination aluminum and epoxy molds have also been used. Epoxy mold parts have the drawback of wearing after repeated use and of being easily damaged during the handling required to carry out repeated molding operations. Additionally, it is well known that aluminum molds have superior heat transfer relative to epoxy molds, thereby reducing dwell time for wax pattern production and overall cycle time.

Where molded parts have included an intricate interior cavity, a plurality of mold sections and cores have been required. The mold parts and cores require handling to accomplish assembly and disassembly. Further, in the molding of demanding shapes such as golf club heads parting lines have presented problems requiring trimming and reworking wax patterns. Prior wax patterns for making golf club heads are disclosed in U.S. Pat. Nos. 5,204,046 and 5,417,559.

SUMMARY OF THE INVENTION

In summary, the present invention comprises a multi-section mold including an inner cluster core which novel mold is shaped and proportioned to facilitate handling during molding operation. Mold manipulation by hand is limited to sliding and translating of mold sections and the removal and replacement of the cluster core.

Preferably, the mold is connected to and operated with a mold press which includes a work station and a preparation station into which a lower mold portion is slidably mounted with inner cluster core in place and the upper mold section is lowered against the lower section. After injection of wax and cooling, the upper section is raised, the lower section is slidably moved out of the work station to the preparation station and a third mold portion is translated in its open position. Finally, the cluster core is removed.

As a feature, it is contemplated that, as the lower section is moved out of the work station, the core along with the wax pattern may be automatically raised to facilitate pattern and core removal. The mold is made of aluminum.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a side elevational view of the upper and lower mold portions assembled with a removable core cluster;

FIG. 2 is a perspective view of the upper and lower portions separated with the core cluster removed;

FIG. 3 is a perspective view of the lower mold portion showing the lower mold cavity and slidable third mold portion in its closed position;

FIG. 3A is a view similar to FIG. 3 with the third mold portion slid open;

FIG. 4 is a perspective view of the upper mold portion;

FIG. 5 is a plan view of the pattern mold with parting lines and with the cluster of cores therein and with the wax pattern, not shown, surrounding the core cluster;

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FIG. 6 is a front elevational view of the pattern mold including parting lines with the wax pattern not shown;

FIG. 7 is an expanded perspective view of the core cluster and mount ring;

FIG. 8 is a front elevational view of the press and mold apparatus with the lower mold in its injection position; and

FIG. 9 is a view similar to FIG. 8 with the lower mold in its assembly preparation station;

FIG. 10 is a front elevational perspective view of an alternative embodiment of the mold apparatus of the invention including the upper mold, the lower mold and the lower mold guide track;

FIG. 11 is a side elevational view partially broken away showing the apparatus assembled and one of the track's slotted rails;

FIG. 12 is a view similar to FIG. 11 in which the upper mold has been raised and the lower mold partially moved along the track;

FIG. 12a is an enlarged side elevational view of the track rail of FIG. 12;

FIG. 13 is a top view of the lower mold;

FIG. 14 is a bottom view of the lower mold;

FIG. 15 is a bottom view of the upper mold;

FIG. 16 is a side view of the lower mold;

FIG. 17 is a perspective view of the portable core cluster stand with upstanding pins;

FIG. 18 is a perspective view of the stand with the cluster mounted thereon;

FIG. 19 is a perspective view of the stand with the cluster mounted thereon and the crank operated to lower the center core unit;

FIG. 20 is a perspective view of the center core unit; and

FIG. 20a is the side elevational view of the center core unit including its prong slot with the crank pin in engagement with the prong slot.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

In the Figures, pattern forming mold unit 10 functions to mold a wax molded pattern P having an exterior surface 11e and an interior surface 11i (see FIG. 5) which pattern P is used in investment casting of a metal part such as a portion of golf club head (see FIGS. 1, 5 and 6). Mold 10 includes four (4) pattern-shape determining portions which create mold cavity C: The first portion is upper mold portion 12; the second is lower mold portion 13; and the third is a slidable mold portion 16 mounted for horizontal slidable movement on lower portion 13 and the fourth portion is the core cluster 23 (see FIGS. 1, 3, 3A and 4). Upper mold portion 12 includes cavity surface 18 which defines upper surface 11u of molded pattern P (not shown) (see FIG. 5). The lower mold portion 13 includes a cavity surface 19 which defines a portion 11i of the lower surface of the molded pattern P. Finally, face surface 21 of slidable mold portion 16 defines the remainder of the exterior surface of pattern P. Face surface 21 includes groove forming stand ups 21g.

Mold 10 also includes a core cluster 23 which is composed of six (6) core sections 26a-f with core section 26f being the center core section (see FIG. 5). Each core section 26a-f has receiving pins 27a-f respectively (FIGS. 1, 5 and 7). The core cluster 23 is positioned in mount ring 29 having holes 31a-f for receiving pins 27a-f. Attached to ring 29 and extending from it is locator prong 32 which fits into mold slot recess 33 to locate core cluster 23.

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Referring now to FIGS. 2, 3 and 4, the size and shape of pattern P is defined by upper mold portion cavity surface 18, lower mold portion cavity surface 19 and face surface 21g of slidable mold portion 16. The parting lines created by mating of cavities 18, 19 and face surface 21 are crown periphery parting line 36 (see FIG. 5) and face periphery parting line 37 (see FIG. 6). These parting lines 36, 37 are located on pattern P such that they are inconspicuous and therefore little or no reworking of molded pattern P is necessary to assure that the mold product made using pattern P has no conspicuous imperfections. Also shown is wax injection port 20.

Turning to FIGS. 8 and 9, mold 10 portions 12 and 13 are positioned for use in a mold press 40 having reciprocating platen 41 movable up and down. Upper mold portion 12 is attached to platen 41. Below reciprocating platen 42 press base 42 supports lower mold portion 13 shown resting in its injection position in FIG. 8 and in its assembly position in FIG. 9).

Lower mold portion 13 is mounted on guide rails (not shown) for ease of horizontal translation on base 42 from its injection station (IS) to its assembly preparation station (PS).

In the operation of mold press 40, lower mold portion 13 is translated horizontally by an operator to preparation station (PS) where the slidable mold portion 16 is moved away from mold surface 19. Cluster of cores 23 are placed in mount ring 29 which ring 29 is mounted and located by insertion of prong 32 in recess 33 in lower mold portion 13. Next, slide mold portion 16 is moved to its injection position. Lower mold portion 13 is translated to its injection station (IS).

Reciprocal platen 41 carrying upper mold portion 12 is then lowered to engage with lower mold portion 13. Alignment pins 24, 25 on upper portion 12 enter alignment holes 34, 35 of lower portion 13. The hosel hole core pin (not shown) is inserted in cavity C to form hosel opening 38 (FIG. 4). Pressure is exerted to hold the mold portions 12, 13 together as wax is injected in the pattern forming cavity C.

After a suitable cooling period for the wax to solidify, the hosel core pin is retracted and then the reciprocal platen 41 carrying the upper mold portion 12 is raised and the lower mold portion 13 is translated from the injection station (IS) to the preparation station (PS). As the lower mold section is retracted toward the operator, the core cluster is moved automatically upward about one-half an inch by means of a wedge or cam device not shown, thereby improved ease of core cluster disassembly. Slide 16 is moved away from both cluster 23 and pattern P. The mount ring 29 including pattern P is then grasped by operator, lifted out of the mold 13 and placed on a stand (not shown). A second mount ring and core cluster unit are placed in lower mold portion 13, mold portion 16 is moved into molding position, lower mold portion 13 translated back to its injection station (IS) and the press mold 40 is ready for the next cycle. The operator holds the wax pattern in one hand and lifts out the core cluster pieces 26a-f, then the core cluster 23 is reassembled for use in the next injection cycle.

An identification piece with marking on it may be placed in mold cavity C causing corresponding markings to appear on the wax pattern P.

Turning to FIGS. 10 to 12, mold press apparatus 50 operates to position mold sections described above for injection, for disassembly and reassembly which mold press 50 apparatus has an upper vertically reciprocal platen 51 to which the upper mold section 52 with beak section 52a is

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attached. Mold press apparatus 50 further includes a lower mold section 53 which is reciprocal in guide track 55 once separated from its upper mold section 52 from an injection position to a retracted position for disassembly and assembly. Movement of lower mold section 53 away from its upper mold section 52, as guided by track 55, is limited by stop piece 65. Pin hosel 58, which extends during operation into and occupies opening 54 (FIG. 15) to create a cylindrical void in the pattern being formed, is attached to a double acting air cylinder-piston unit 67. Cylinder-piston unit 67 is mounted on platen 51. Track 55 includes spaced-apart guide left rail 56 and right rail 57 (as viewed in FIG. 10) with each rail 56, 57 including guide slots 68a, 68b forward upper guide slots 69a, 69b, forward lower guide slots 71a, 71b and spring-loaded ramp 56a (FIG. 12a). Spring-loaded ramp 56a having slot 79a is swingable in rail pocket 72a.

Lower mold section cross bar 59 positioned in opening 62 of lower mold section 53 (FIG. 16) has cross bar 59 with right stud end 60 and left stud end 61 (not shown) which ends 60, 61 ride in guide slots 68a, 68b and 71a, 71b (FIG. 12a). Turning back to FIG. 12a, bar stud end 60 rides in a path indicated by arrows A during lower mold 53 movement toward stop piece 65 in guide slot 68a until it enters slot 79a of ramp 56a causing stud end 60 to be raised up into upper guide slot 69a and as it continues forward to pass into guide slot recess areas 87a, 87b. Stud end 60, under spring urging, then drops down into lower slot 71a for return. As stud end 60 engages ramp lower surface 56s of ramp 56a during such return it raises ramp 56a and continues rearward through slot 68a.

Turning further to FIG. 16, lower mold section opening 62 houses support plate 63 which rides up and down on vertical rods 64a and 64b (not shown). Springs 65a, 65b urge plate 63 downwardly. Plate 63 engages and causes upward movement of center core unit 88 during the withdrawal of lower mold section 53 to its disassembly/assembly station adjacent stop piece 65 and simultaneously shears injection sprue. Plate 63 is raised by bar stud ends 60, 61 travelling in guide slots as described above. The raising and lowering of plate 63 under action of cross bar 59 with its ends 60, 61 is accomplished by the inclined groove system of FIG. 12a serving stud end 60 and a similar groove system in rail 56 serving stud end 61, all as explained above.

Turning now to FIGS. 13-16, lower mold section 53 includes air cylinder stand-off portion 53s, a slide mold section 70 riding in slide pocket 70p having face 70f and core 73. When upper mold section 53 is raised its beak section 52a releases slide mold section 70 allowing it to move away from pattern (P) under force of a spring element (not shown). Lower mold section 53 further includes bottom surface 74 with a plurality of air (or other fluid) exit holes 76 arranged in rows 77a-e. Air exit holes 76 may be arranged in rows or any other pattern. Air exit holes 76 are connected to an air manifold (not shown).

When the core 73 is placed in lower mold section 13, six (6) rare earth magnets 98 (FIG. 13), aligned with core pins 95a-f, magnetically attract pins 95a-f in assuring the pins 95a-f are properly seated in lower mold section 53 against plate 63 (FIG. 16).

In FIGS. 17 and 18, a portable core cluster handling device 82 normally positioned on surface S of mold apparatus 50 (FIG. 10) includes body 83 with front panel 83f and top surface 83t. Upstanding pins 85 are mounted on top surface 83t and there is an opening 83a in top surface 83t to receive central core prong 86 of central core unit 88 (see

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FIG. 20). Device 82 has a crank 81 pivoted on pin 80 in front panel 83f. Crank 81 carries projecting cam pin 78 which projects through front face slot 75 into prong slot 86s. Pattern (P) is positioned on core cluster 73. Core 73 includes central core unit 88 which in turn also includes ring body 89 and central core 91. Ring body 89 includes holes 90 for receiving the pins 95a-f of core sections 94a-c (see FIGS. 18, 19 and also FIGS. 5 and 7).

In the operation of mold apparatus 50 and portable associated device 83, upon wax or other mold material injection into engaged mold sections 52, 53 through sprue hole (not shown) together with core pin 58 in place, pin 58 is withdrawn and upper platen 51 with its attached mold section 52, after a proper time delay, are raised. Preferably, this step of mold apparatus 50 and subsequent steps are automatically operated in a computer programmed control sequence. As upper mold section 52 moves up and away from lower mold slide section 70, mold slide section 70 is free under spring urging to move away from the molded pattern (P). Next, the operator grasps handle 53h and at the same time opens air handle valve 53v (FIG. 10) causing air to flow out lower mold bottom holes 76 providing an air cushion between the lower mold bottom surface 74 and the press table surface (S).

Lower mold section 53 is then pulled with ease on air cushion by the operator in direction D (FIG. 10). As lower mold section 53 moves toward stop piece 65, lower mold plate 63 is lifted due to the camming action of cross bar 59 with its stud ends 60, 61 as such stud ends 60, 61 are cammed upwardly in guide slots 68, 68b, 69a, 69b and 71a, 71b causing core unit 88 to rise up (FIG. 12a). The sprue (not shown) is severed as core unit 88 rises. When stud ends 60, 61 reach the ends of slots 69a, 69b they drop down through recesses 87a, 87b under action of spring-loaded plate 63. Stud ends 60, 61 are then free to move under slots 71a, 71b as mold section 53 is pushed by the operator back to its position for mating with upper mold 52. Core unit 88, having been raised by plate 63, is then readily grasped by the operator for removal. As core unit 88 is extracted the injection sprue is sheared off. Lubricant or cold air may be sprayed on the hosel pin 58 to reduce sticking.

The operator then places the wax pattern (P) with the internal core cluster 73 on core cluster mount device 82. The center core 88 is extracted by operating crank 81. The projection pin 78 of crank 81 engages slot 86s of prong 86 to cause prong 86 to move downwardly as crank 81 is pushed down. As prong 86 is lowered by crank action, ring holes 90 accommodate upstanding pins 85 permitting downward movement until ring center cluster 89 is seated on device top surface 83f. Center core 88 is thereby separated from pattern (P) without the operator grasping pattern (P) which could cause its deformation. The remaining core sections are then readily removed by hand and places them on a pedestal for assembly.

We claim:

1. An injection mold for forming a pattern having an exterior surface and an interior surface which pattern is useful in investment casting comprising

- (a) a plurality of mold sections assembled for molding the pattern and disassembled to release the pattern; the assembly of such sections forming parting lines between said mold sections and in the pattern during molding;
- (b) the mold sections carrying a plurality of pattern forming mold surface elements for forming the exterior surface of the pattern which mold surface elements include
 - i) a first element having a first pattern-forming surface on a mold section therein;

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- ii) a second element having a second pattern forming surface on a mold section therein; and

- iii) a translatable third pattern-forming element movable along a mold section which third pattern-forming element forms a further parting line among said mold sections and in the pattern being formed;

- (c) an inner core for defining the interior surface of the mold pattern; and

- (d) the mold sections and the third pattern-forming element being sized and shaped so that said parting lines in the pattern are located in non-conspicuous locations on the pattern.

2. The injection mold of claim 1 in which the mold pattern is a pattern for making a golf club wood head which pattern has a head crown periphery and a face periphery and in which one parting line is on the crown periphery of the pattern head and another parting line is on the face periphery of the head pattern.

3. The injection mold of claim 1 in which one of said mold sections is an upper section and another of said mold sections is a lower section and the inner core is on the lower section and said inner core includes a cluster of core sections.

4. The injection mold of claim 3 having in addition a ring and prong device insertable into one of said mold sections with said cluster of core sections mounted on said device.

5. The injection mold of claim 1 in which the mold sections are aluminum.

6. The injection mold of claim 3 in which the ring and prong device is mounted for reciprocal vertical movement on lower mold section.

7. A mold press arrangement for supporting and moving a pattern mold having an upper and a lower mold portion including a core cluster unit comprising

- (a) a vertically reciprocal platen means carrying the upper mold portion;

- (b) base means upon which the lower mold portion is translatable from an injection station to a preparation station; and

- (c) core cluster unit lifting means located in the base means to lift the cluster unit when said cluster unit is in said preparation station.

8. An apparatus for forming a mold pattern comprising

- a. an upper mold section;

- b. a lower mold section transportable along a surface from a molding position to a remote position;

- c. a core cluster positioned in the lower mold section; and

- d. guide track means for guiding the lower mold section during its transport from said molding position to said remote position for removal of the core cluster.

9. The apparatus of claim 8 having in addition a first cam means on the track means and a second cam means on the lower mold section which cam means causes the core cluster to move upwardly when the lower mold section is moved along the track means.

10. The apparatus of claim 8 having in addition fluid ejecting means for creating supply fluid between the lower mold section and the surface.

11. The apparatus of claim 8 having in addition a center core in the cluster core and a device for receiving the cluster core with a pattern on it and for separating the center core from the cluster core.

12. The apparatus of claim 8 in which the lower mold section includes magnet means to attract the core cluster toward the lower mold section.

* * * * *

PLAINTIFF'S EXHIBIT 5

U.S. Patent No.
6,180,047

In The Case Of

Tim Barrett, Individually and On Behalf of All Others Similarly Situated,

v.

Milwaukee Electric Tool, Inc., d/b/a Stiletto Tools, Inc.

KAZEROUNI LAW GROUP, APC
245 FISCHER AVENUE, UNIT D1, COSTA MESA, CA 92626
(800) 400-6808

(12) **United States Patent**
Yost et al.

(10) **Patent No.: US 6,180,047 B1**
(45) **Date of Patent: Jan. 30, 2001**

(54) **METHOD OF PRODUCING A PATTERN MOLD**

(75) Inventors: **Thomas E. Yost, Prescott; Paul N. Latulippe, Jr., Chino Valley, both of AZ (US)**

(73) Assignee: **Sturm, Ruger & Company, Inc., Southport, CT (US)**

(*) Notice: Under 35 U.S.C. 154(b), the term of this patent shall be extended for 0 days.

(21) Appl. No.: **09/207,104**

(22) Filed: **Dec. 7, 1998**

Related U.S. Application Data

(60) Division of application No. 08/931,773, filed on Sep. 16, 1997, now Pat. No. 5,908,643, which is a continuation-in-part of application No. 08/891,435, filed on Jul. 10, 1997, now abandoned, which is a continuation of application No. 08/662,900, filed on Jun. 12, 1996, now abandoned.

(51) Int. Cl.⁷ **B29C 39/04**

(52) U.S. Cl. **264/328.1; 264/334; 249/64; 425/DIG. 58**

(58) Field of Search **264/328.1, 318, 264/297.2, 297.3, 297.6, 297.7, 328.9, 328.11, 328.2; 164/340, 341, 342, 246, 30; 249/63, 64, 175-177; 425/185, 186, 190, 192 R, 441, 468, DIG. 5, DIG. 10, DIG. 58**

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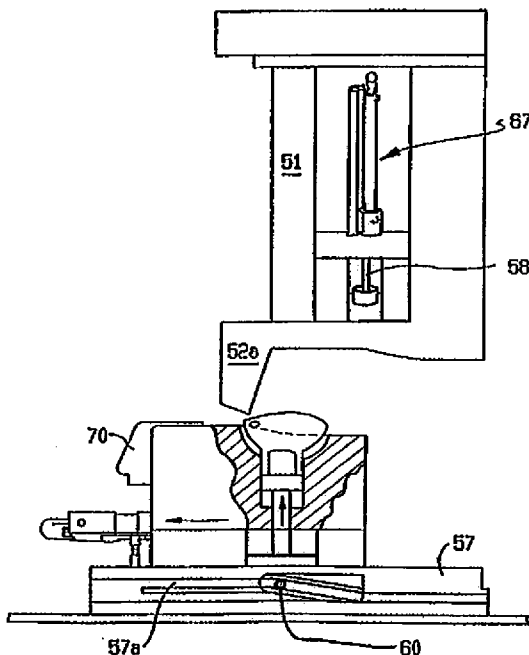
Primary Examiner—Jill L. Heitbrink

(74) *Attorney, Agent, or Firm*—Pennie & Edmonds LLP

(57) **ABSTRACT**

An injection mold for forming a pattern for use in investment casting having mold sections carrying two pattern-forming surfaces and a translatable third pattern-forming element movable on a mold section. The mold also includes an inner core. Parting lines are located at inconspicuous locations by sizing and shaping the mold sections. The method of use of the injection mold includes employing an arrangement for facilitating lower mold section and for raising the inner core to facilitate its removal.

6 Claims, 14 Drawing Sheets



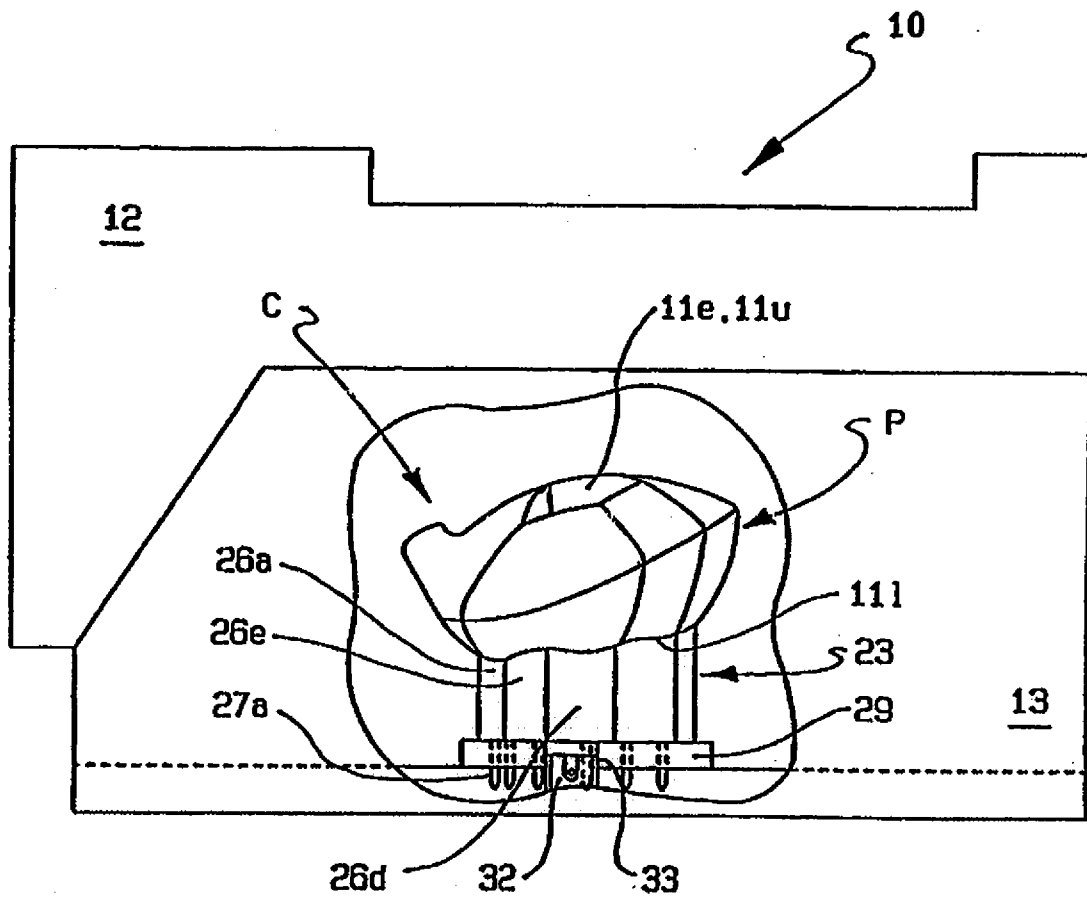


FIG. 1

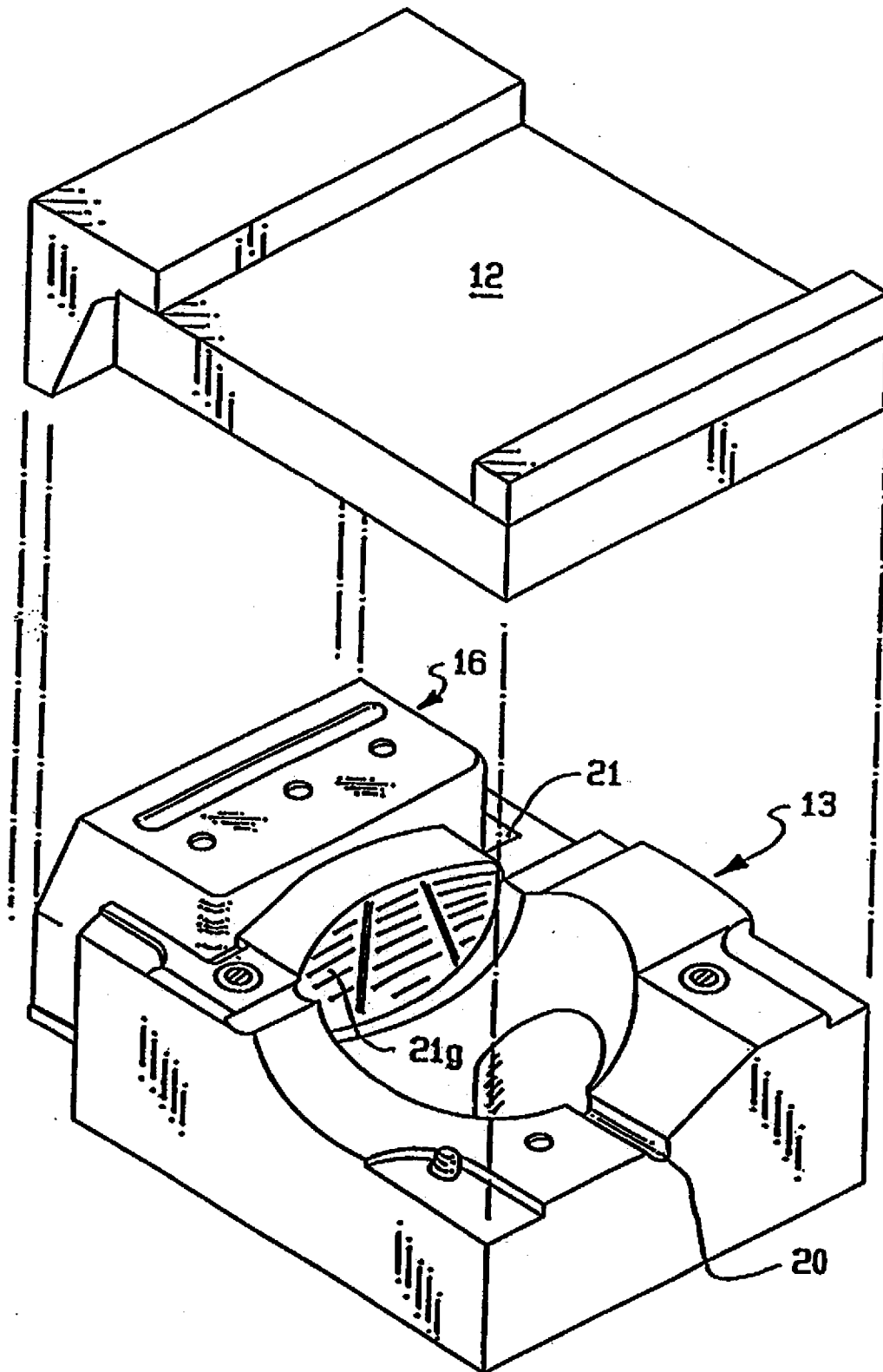


FIG. 2

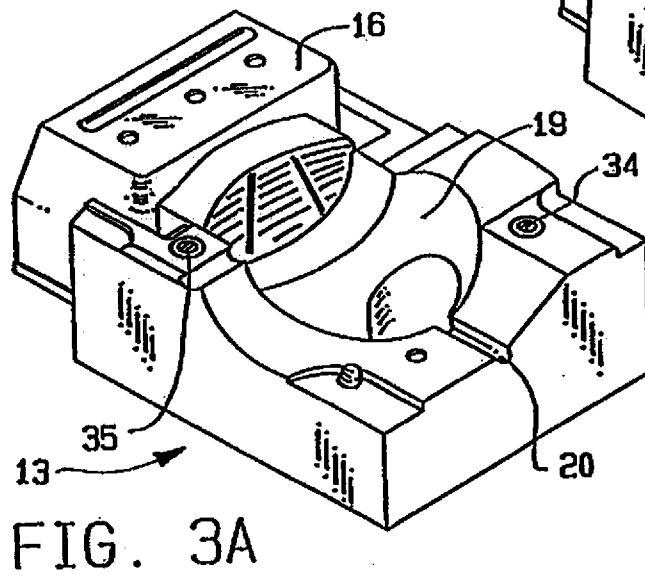
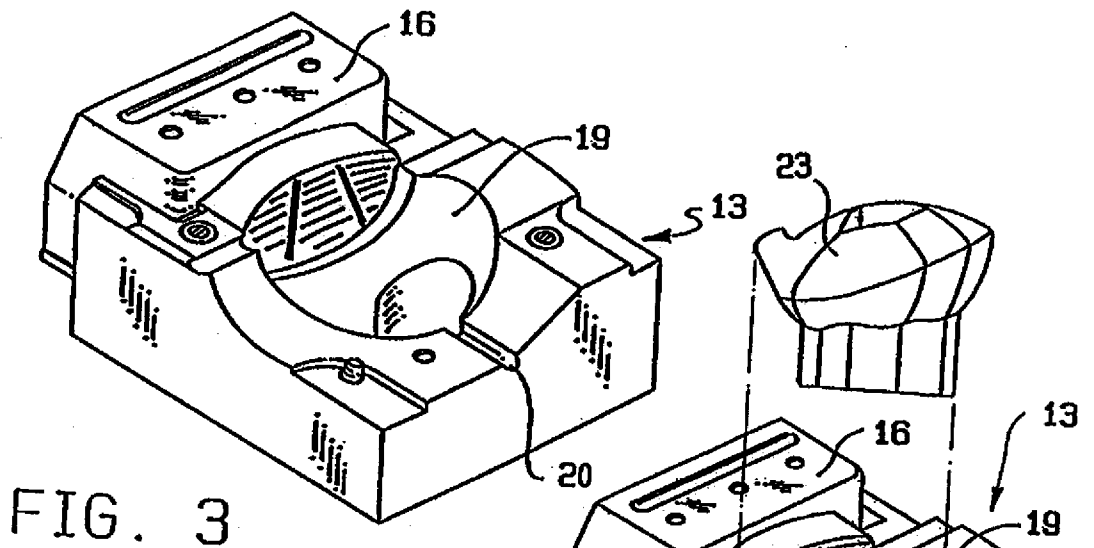
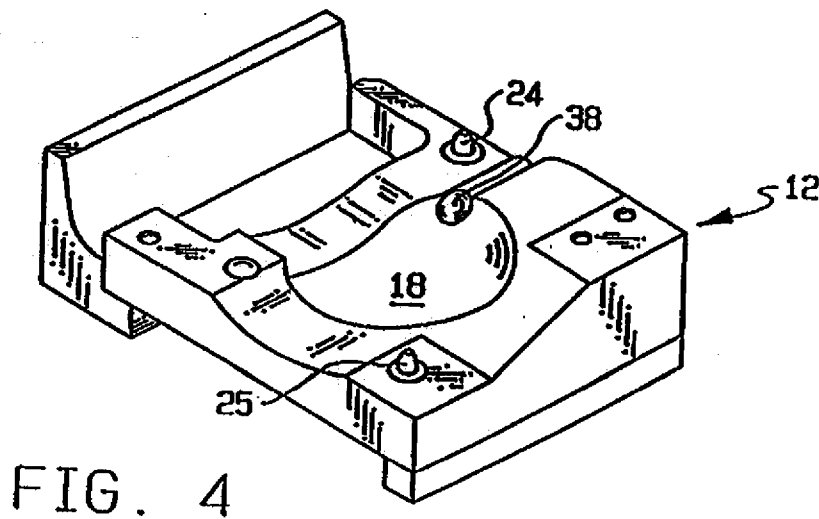


FIG. 3b



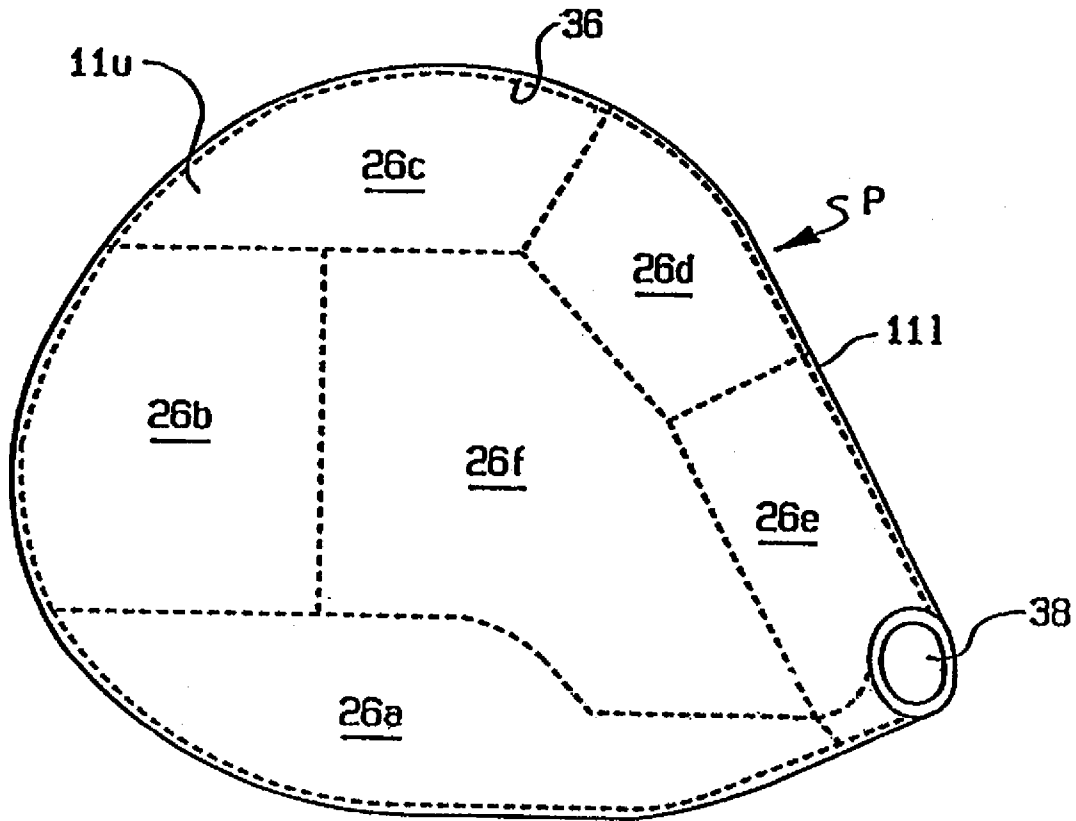


FIG. 5

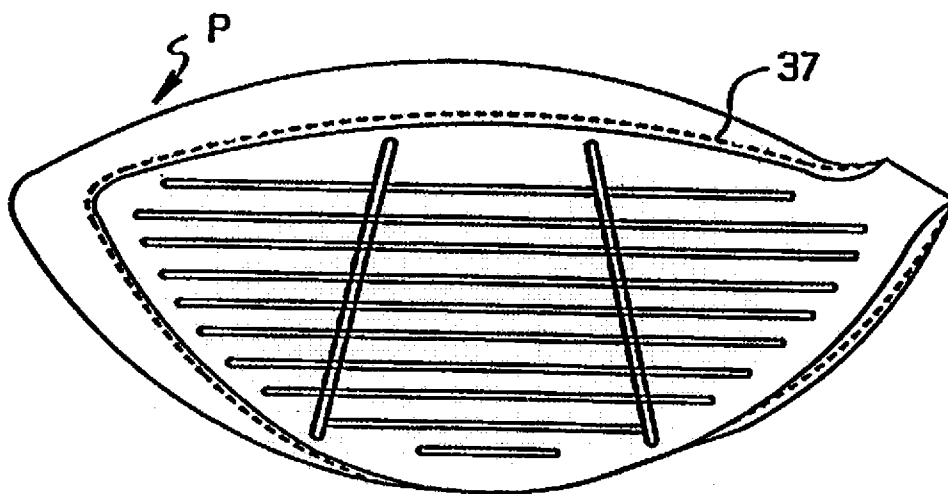


FIG. 6

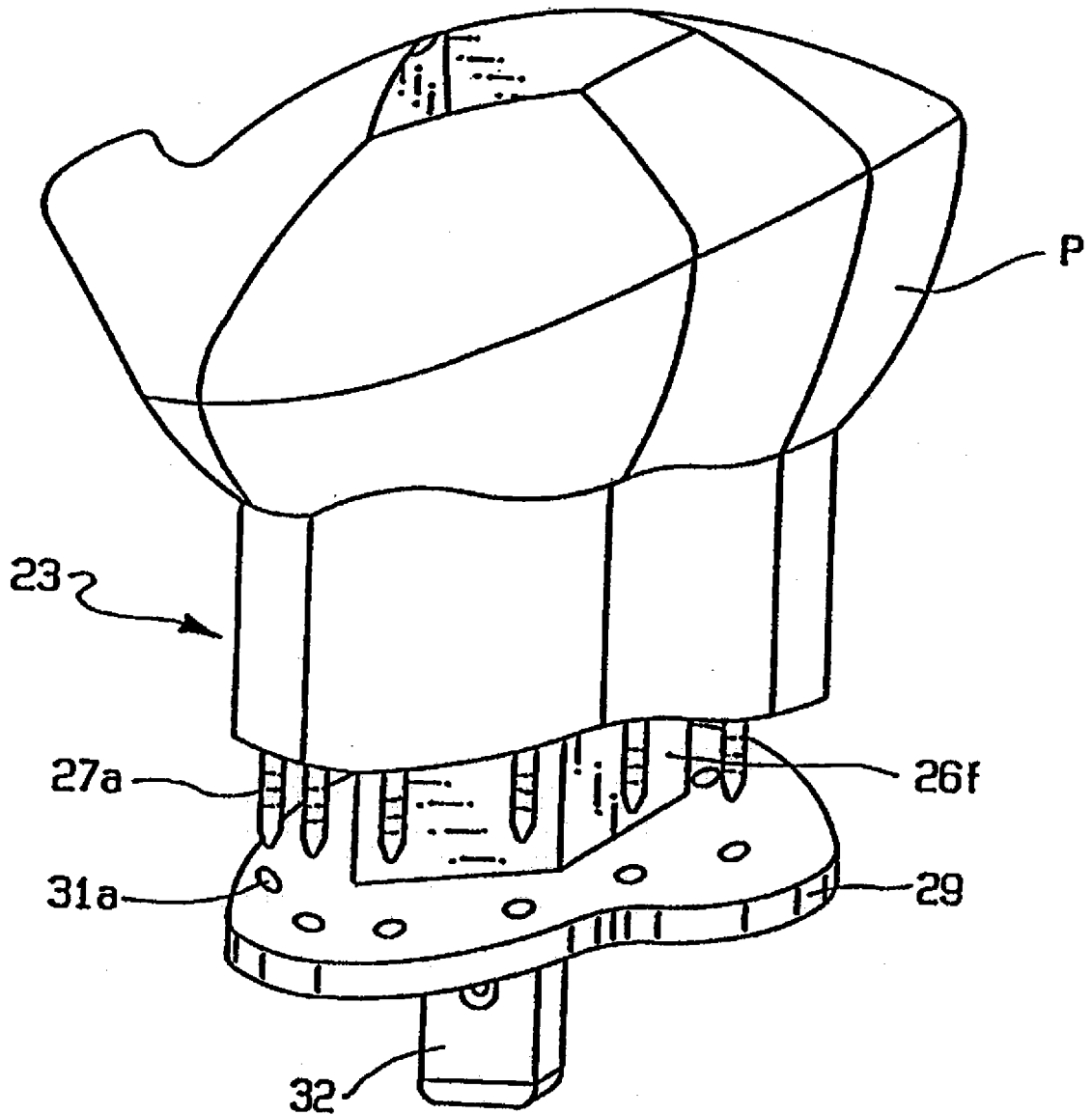


FIG. 7

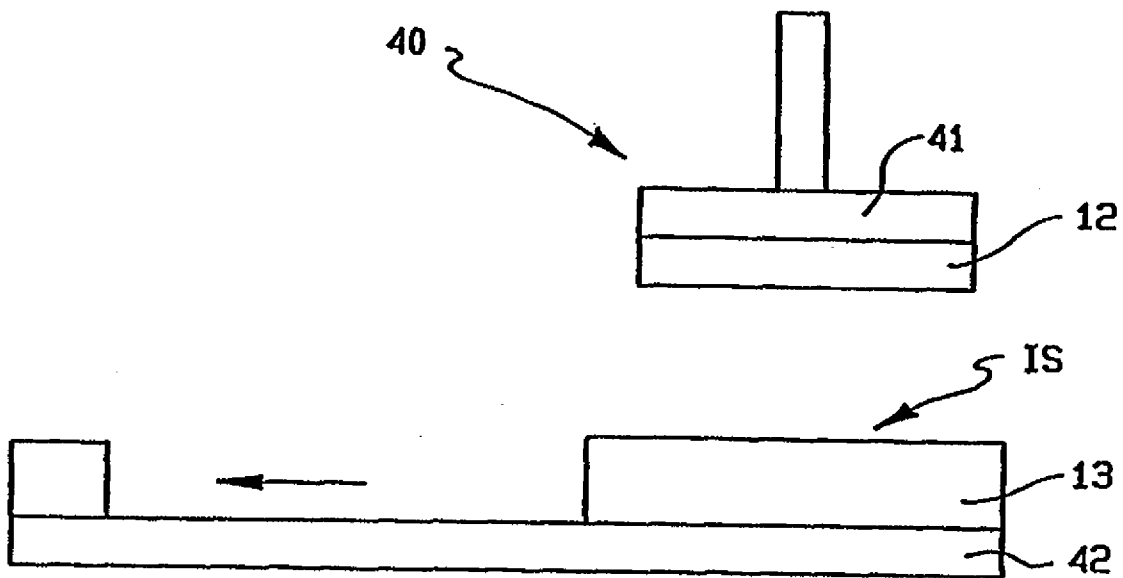


FIG. 8

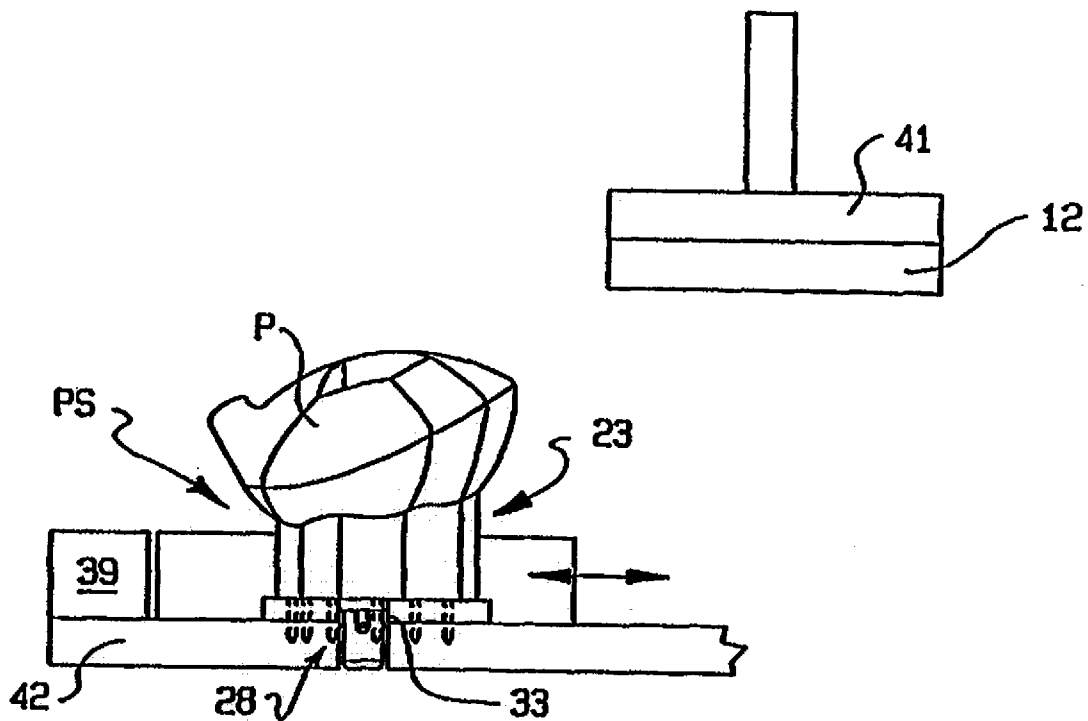
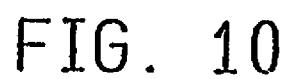


FIG. 9



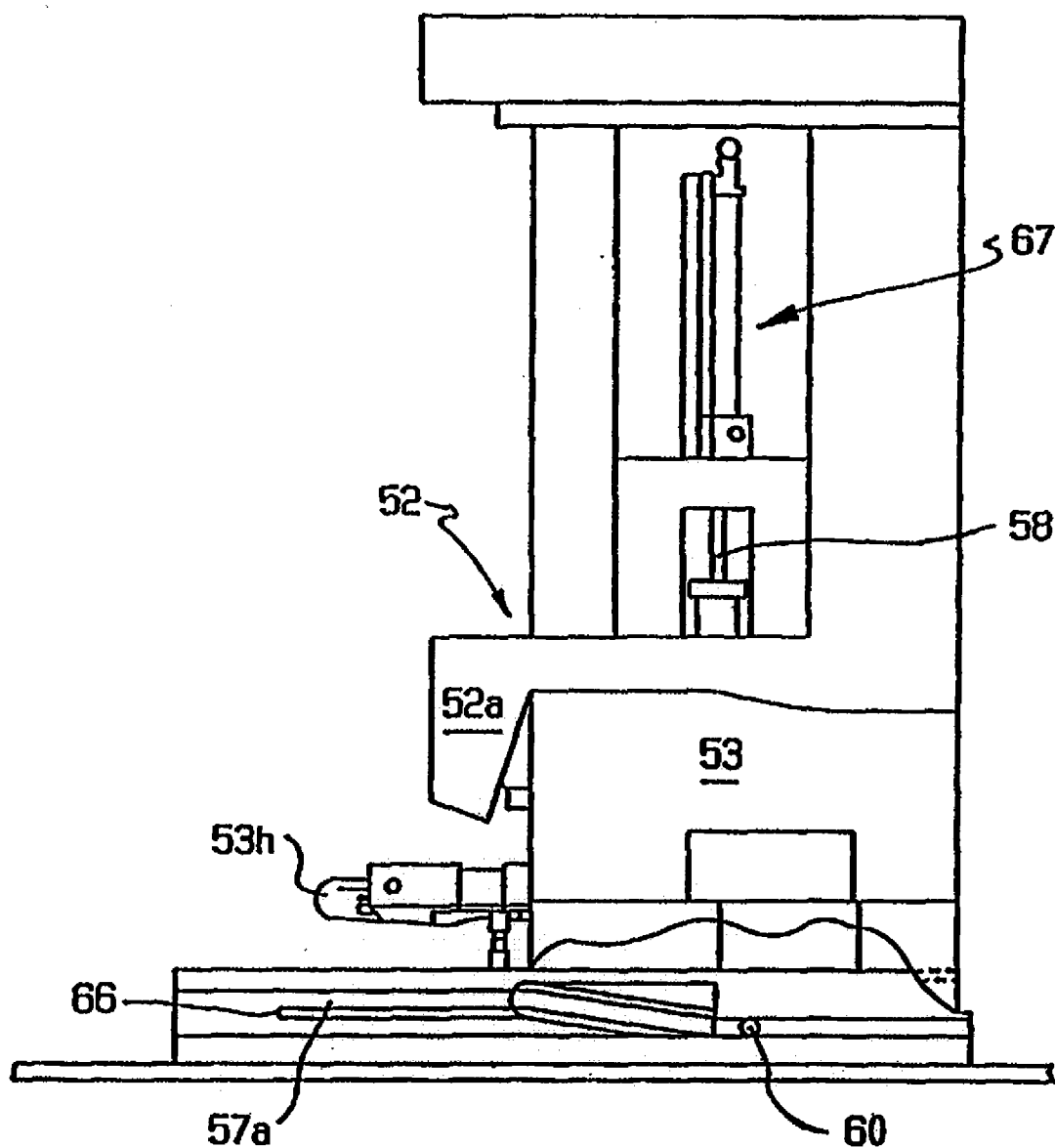


FIG. 11

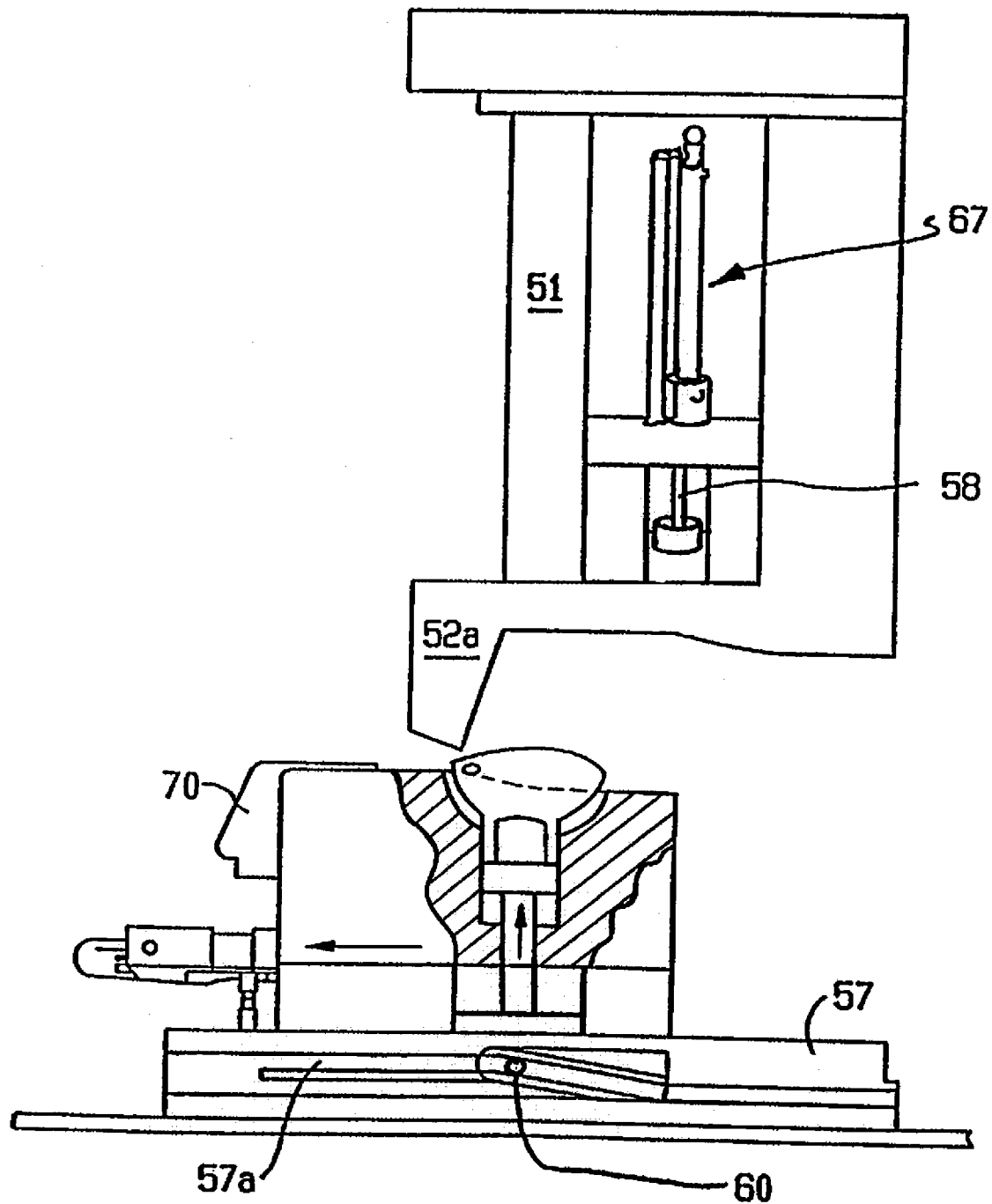


FIG. 12

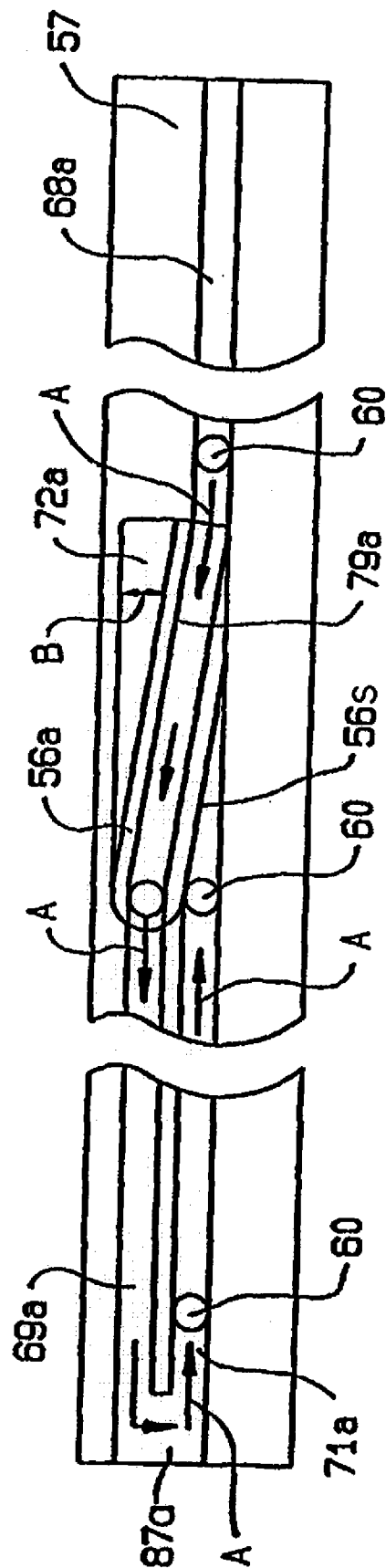


FIG. 12a

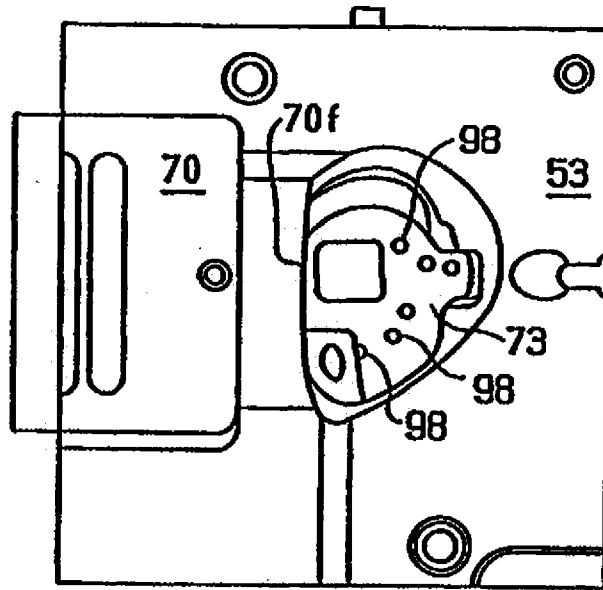


FIG. 13

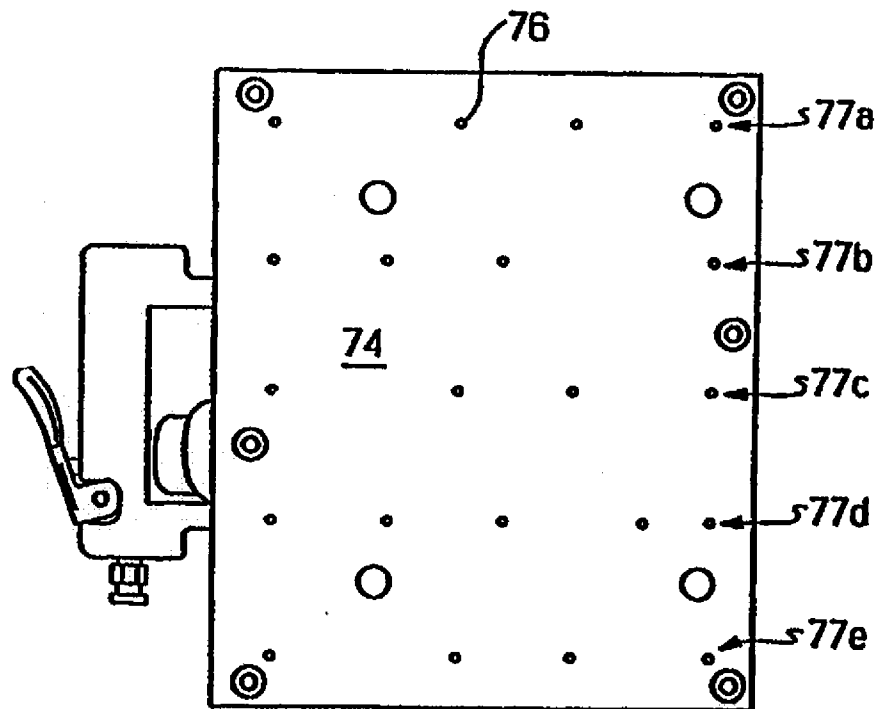


FIG. 14

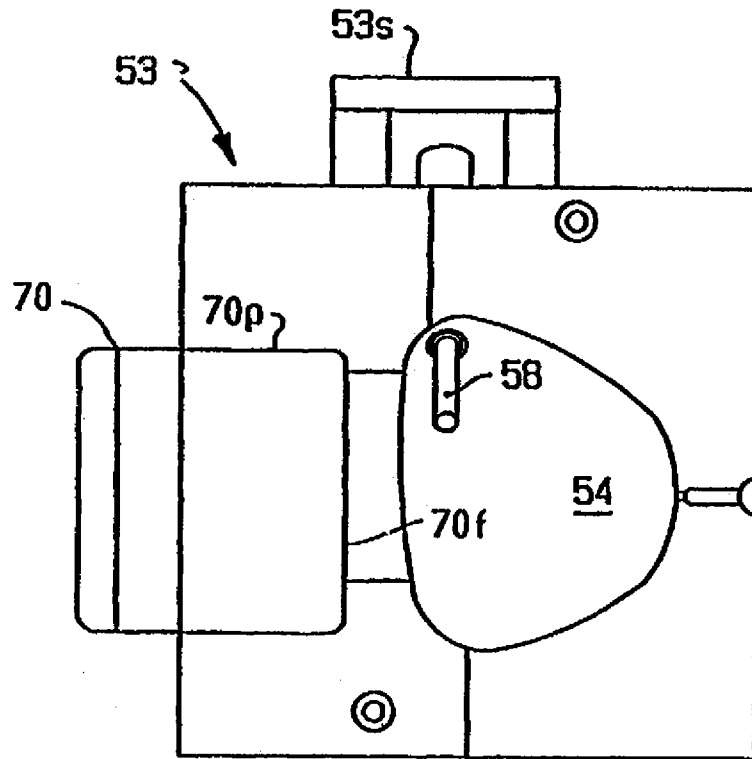


FIG. 15

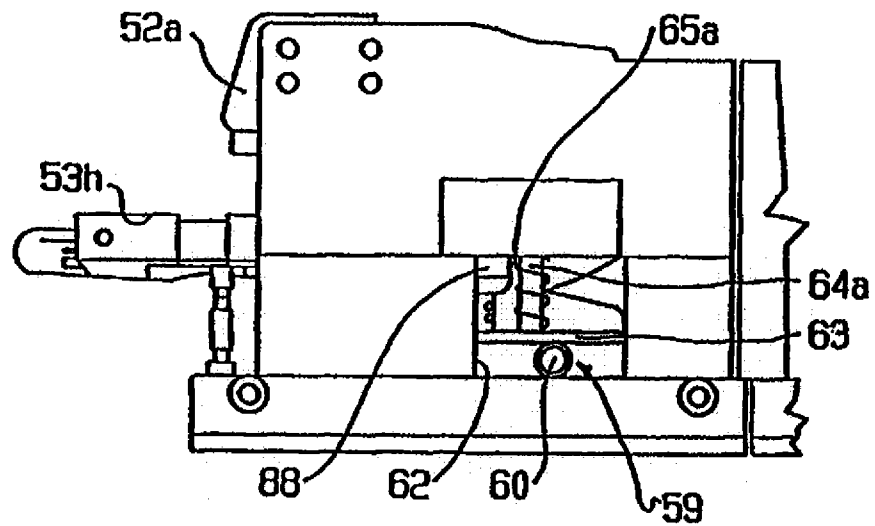


FIG. 16

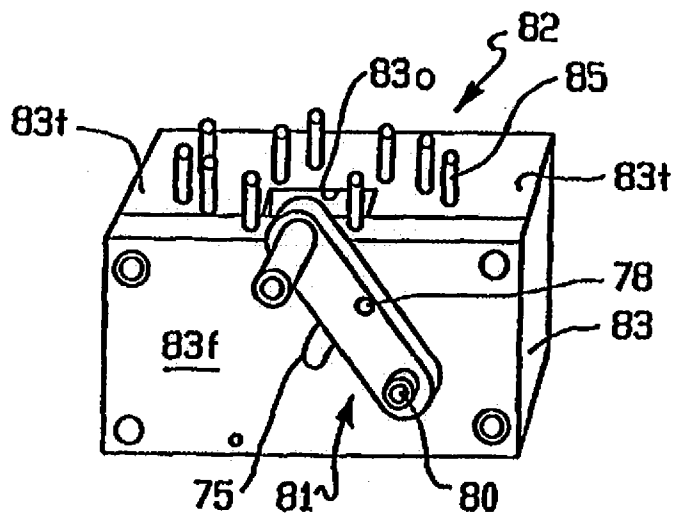


FIG. 17

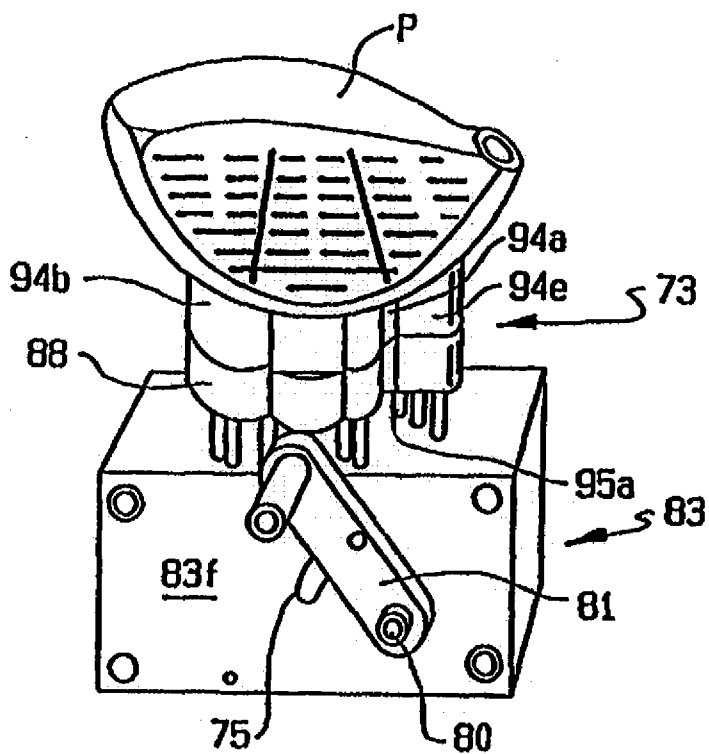


FIG. 18

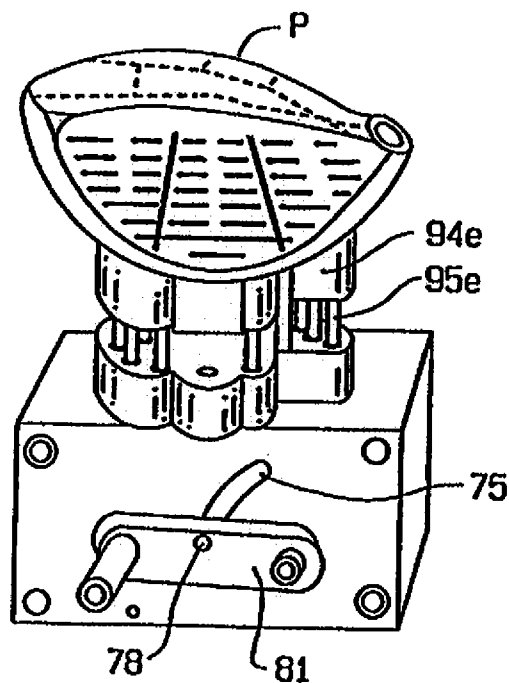


FIG 19

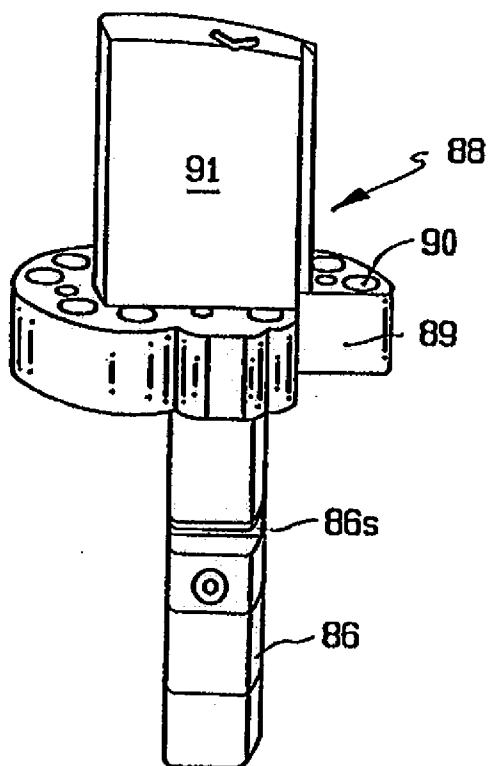


FIG. 20

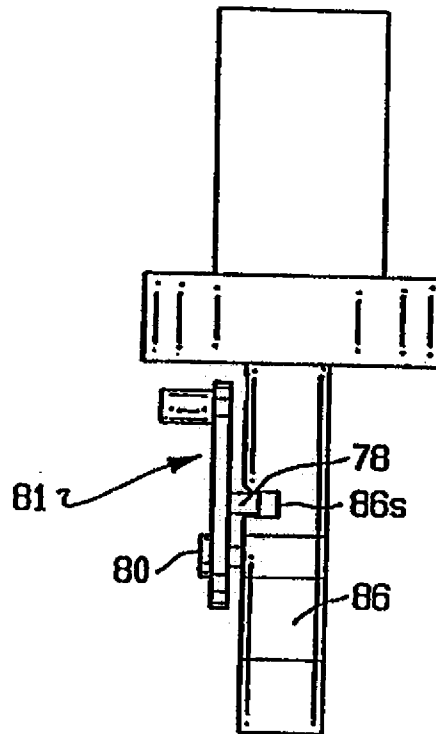


FIG. 20A

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METHOD OF PRODUCING A PATTERN MOLD

RELATED APPLICATIONS

This application is a divisional of an application filed Sep. 16, 1997 entitled "Injection Mold For Producing A Pattern And Method of Mold Use" Ser. No. 08/931,773 which U.S. Pat. No. 5,908,643 which application in turn was a continuation-in-part of an application filed Jul. 10, 1997 having the same title, Ser. No. 08/891,435 which in turn was a continuation of U.S. application Ser. No. 08/662,900 filed Jun. 12, 1996, also of the same title both are abandoned.

BACKGROUND OF THE INVENTION

Aluminum molds for making wax patterns have been in use for years. Combination aluminum and epoxy molds have also been used. Epoxy mold parts have the drawback of wearing after repeated use and of being easily damaged during the handling required to carry out repeated molding operations. Additionally, it is well known that aluminum molds have superior heat transfer relative to epoxy molds, thereby reducing dwell time for wax pattern production and overall cycle time.

Where molded parts have included an intricate interior cavity, a plurality of mold sections and cores have been required. The mold parts and cores require handling to accomplish assembly and disassembly. Further, in the molding of demanding shapes such as golf club heads parting lines have presented problems requiring trimming and reworking wax patterns. Prior wax patterns for making golf club heads are disclosed in U.S. Pat. Nos. 5,204,046 and 5,417,559.

SUMMARY OF THE INVENTION

In summary, the present invention comprises a multi-section mold including an inner cluster core which novel mold is shaped and proportioned to facilitate handling during molding operation. Mold manipulation by hand is limited to sliding and translating of mold sections and the removal and replacement of the cluster core.

Preferably, the mold is connected to and operated with a mold press which includes a work station and a preparation station into which a lower mold portion is slidably mounted with inner cluster core in place and the upper mold section is lowered against the lower section. After injection of wax and cooling, the upper section is raised, the lower section is slidably moved out of the work station to the preparation station and a third mold portion is translated in its open position. Finally, the cluster core is removed.

As a feature, it is contemplated that, as the lower section is moved out of the work station, the core along with the wax pattern may be automatically raised to facilitate pattern and core removal. The mold is made of aluminum.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a side elevational view of the upper and lower mold portions assembled with a removable core cluster;

FIG. 2 is a perspective view of the upper and lower portions separated with the core cluster removed;

FIG. 3 is a perspective view of the lower mold portion showing the lower mold cavity and slidable third mold portion in its closed position;

FIGS. 3A and 3B are views similar to FIG. 3 with the third mold portion slid open;

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FIG. 4 is a perspective view of the upper mold portion;

FIG. 5 is a plan view of the pattern mold with parting lines and with the cluster of cores therein and with the wax pattern, not shown, surrounding the core cluster;

FIG. 6 is a front elevational view of the pattern mold including parting lines with the wax pattern not shown;

FIG. 7 is an expanded perspective view of the core cluster and mount ring;

FIG. 8 is a front elevational view of the press and mold apparatus with the lower mold in its injection position; and

FIG. 9 is a view similar to FIG. 8 with the lower mold in its assembly preparation station;

FIG. 10 is a front elevational perspective view of an alternative embodiment of the mold apparatus of the invention including the upper mold, the lower mold and the lower mold guide track;

FIG. 11 is a side elevational view partially broken away showing the apparatus assembled and one of the track's slotted rails;

FIG. 12 is a view similar to FIG. 11 in which the upper mold has been raised and the lower mold partially moved along the track;

FIG. 12a is an enlarged side elevational view of the track rail of FIG. 12;

FIG. 13 is a top view of the lower mold;

FIG. 14 is a bottom view of the lower mold;

FIG. 15 is a bottom view of the upper mold;

FIG. 16 is a side view of the lower mold;

FIG. 17 is a perspective view of the portable core cluster stand with upstanding pins;

FIG. 18 is a perspective view of the stand with the cluster mounted thereon;

FIG. 19 is a perspective view of the stand with the cluster mounted thereon and the crank operated to lower the center core unit;

FIG. 20 is a perspective view of the center core unit; and

FIG. 20a is the side elevational view of the center core unit including its prong slot with the crank pin in engagement with the prong slot.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

In the Figures, pattern forming mold unit 10 functions to mold a wax molded pattern P having an exterior surface 11e and an interior surface 11i (see FIG. 5) which pattern P is used in investment casting of a metal part such as a portion of golf club head (see FIGS. 1, 5 and 6). Mold 10 includes four (4) pattern-shape determining portions which create mold cavity C: The first portion is upper mold portion 12; the second is lower mold portion 13; and the third is a slidable mold portion 16 mounted for horizontal slidable movement on lower portion 13 and the fourth portion is the core cluster 23 (see FIGS. 1, 3, 3A and 4). Upper mold portion 12 includes cavity surface 18 which defines upper surface 11u of molded pattern P (not shown) (see FIG. 5). The lower mold portion 13 includes a cavity surface 19 which defines a portion 11i of the lower surface of the molded pattern P. Finally, face surface 21 of slidable mold portion 16 defines the remainder of the exterior surface of pattern P. Face surface 21 includes groove forming stand ups 21g.

Mold 10 also includes a core cluster 23 which is composed of six (6) core sections 26a-f with core section 26f

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being the center core section (see FIG. 5). Each core section 26a-f has receiving pins 27a-f respectively (FIGS. 1, 5 and 7). The core cluster 23 is positioned in mount ring 29 having holes 31a-f for receiving pins 27a-f. Attached to ring 29 and extending from it is locator prong 32 which fits into mold slot recess 33 to locate core cluster 23.

Referring now to FIGS. 2, 3 and 4, the size and shape of pattern P is defined by upper mold portion cavity surface 18, lower mold portion cavity surface 19 and face surface 21g of slidable mold portion 16. The parting lines created by mating of cavities 18, 19 and face surface 21 are crown periphery parting line 36 (see FIG. 5) and face periphery parting line 37 (see FIG. 6). These parting lines 36, 37 are located on pattern P such that they are inconspicuous and therefore little or no reworking of molded pattern P is necessary to assure that the mold product made using pattern P has no conspicuous imperfections. Also shown is wax injection port 20.

Turning to FIGS. 8 and 9, mold 10 portions 12 and 13 are positioned for use in a mold press 40 having reciprocating platen 41 movable up and down. Upper mold portion 12 is attached to platen 41. Below reciprocating platen 41 press base 42 supports lower mold portion 13 shown resting in its injection position in FIG. 8 and in its assembly position in FIG. 9).

Lower mold portion 13 is mounted on guide rails (not shown) for ease of horizontal translation on base 42 from its injection station (IS) to its assembly preparation station (PS).

In the operation of mold press 40, lower mold portion 13 is translated horizontally by an operator to preparation station (PS) where the slidable mold portion 16 is moved away from mold surface 19. Cluster of cores 23 are placed in mount ring 29 which ring 29 is mounted and located by insertion of prong 32 in recess 33 in lower mold portion 13. Next, slide mold portion 16 is moved to its injection position. Lower mold portion 13 is translated to its injection station (IS).

Reciprocal platen 41 carrying upper mold portion 12 is then lowered to engage with lower mold portion 13. Alignment pins 24, 25 on upper portion 12 enter alignment holes 34, 35, of lower portion 13. The hosel hole core pin (not shown) is inserted in cavity C to form hosel opening 38 (FIG. 4). Pressure is exerted to hold the mold portions 12, 13 together as wax is injected in the pattern forming cavity C.

After a suitable cooling period for the wax to solidify, the hosel core pin is retracted and then the reciprocal platen 41 carrying the upper mold portion 12 is raised and the lower mold portion 13 is translated from the injection station (IS) to the preparation station (PS). As the lower mold section is retracted toward the operator, the core cluster is moved automatically upward about one-half an inch by means of a wedge or cam device not shown, thereby improved ease of core cluster disassembly. Slide 16 is moved away from both cluster 23 and pattern P. The mount ring 29 including pattern P is then grasped by operator, lifted out of the mold 13 and placed on a stand (not shown). A second mount ring and core cluster unit are placed in lower mold portion 13, mold portion 16 is moved into molding position, lower mold portion 13 translated back to its injection station (IS) and the press mold 40 is ready for the next cycle. The operator holds the wax pattern in one hand and lifts out the core cluster pieces 26a-f, then the core cluster 23 is reassembled for use in the next injection cycle.

An identification piece with marking on it may be placed in mold cavity C causing corresponding markings to appear on the wax pattern P.

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Turning to FIGS. 10 to 12, mold press apparatus 50 operates to position mold sections described above for injection, for disassembly and reassembly which mold press 50 apparatus has an upper vertically reciprocal platen 51 to which the upper mold section 52 with beak section 52a is attached. Mold press apparatus 50 further includes a lower mold section 53 which is reciprocal in guide track 55 once separated from its upper mold section 52 from an injection position to a retracted position for disassembly and assembly. Movement of lower mold section 53 away from its upper mold section 52, as guided by track 55, is limited by stop piece 65. Pin hosel 58, which extends during operation into and occupies opening 54 (FIG. 15) to create a cylindrical void in the pattern being formed, is attached to a double acting air cylinder piston unit 67. Cylinder-piston unit 67 is mounted on platen 51. Track 55 includes spaced-apart guide left rail 56 and right rail 57 (as viewed in FIG. 10) with each rail 56, 57 including guide slots 68a, 68b forward upper guide slots 69a, 69b, forward lower guide slots 71a, 71b and spring-loaded ramp 56a (FIG. 12a). Spring-loaded ramp 56a having slot 79a is swingable in rail pocket 72a.

Lower mold section cross bar 59 positioned in opening 62 lower mold section 53 (FIG. 16) has cross bar 59 with right stud end 60 and left stud end 61 (not shown) which ends 60, 61 ride in guide slots 68a, 68b and 71a, 71b (FIG. 12a). Turning back to FIG. 12a, bar stud end 60 rides in a path indicated by arrows A during lower mold 53 movement toward stop piece 65 in guide slot 68a until it enters slot 79a of ramp 56a causing stud end 60 to be raised up into upper guide slot 69a and as it continues forward to pass into guide slot recess areas 87a, 87b. Stud end 60, under spring urging, then drops down into lower slot 71a for return. As stud end 60 engages ramp lower surface 56s of ramp 56a during such return it raises ramp 56a and continues rearward through slot 68a.

Turning further to FIG. 16 lower mold section opening 62 houses support plate 63 which rides up and down on vertical rods 64a and 64b (not shown). Springs 65a, 65b urge plate 63 downwardly. Plate 63 engages and causes upward movement of center core unit 88 during the withdrawal of lower mold section 53 to its disassembly/assembly station adjacent stop piece 65 and simultaneously shears injection sprue. Plate 53 is raised by bar stud ends 60, 61 travelling in guide slots as described above. The raising and lowering of plate 63 under action of cross bar 59 with its ends 60, 61 is accomplished by the inclined groove system of FIG. 12a serving stud end 60 and a similar groove system in rail 56 serving stud end 61, all as explained above. Turning now to FIGS. 13-16, lower mold section 53 includes air cylinder stand-off portion 53s, a slide mold section 70 riding in slide pocket 70p having face 70f and core 73. When upper mold section 53 is raised its beak section 52a releases slide mold section 70 allowing it to move away from pattern (P) under force of a spring element (not shown). Lower mold section 53 further includes bottom surface 74 with a plurality of air (or other fluid) exit holes 76 arranged in rows 77a-e. Air exit holes 76 may be arranged in rows or any other pattern. Air exit holes 76 are connected to an air manifold (not shown).

When the core 73 is placed in lower mold section 13, six (6) rare earth magnets 98 (FIG. 13), aligned with core pins 95a-f, magnetically attract pins 95a-f in assuring the pins 95a-f are properly seated in lower mold section 53 against plate 63 (FIG. 16).

In FIGS. 17 and 18, a portable core cluster handling device 82 normally positioned on surface S of mold apparatus 50 (FIG. 10) includes body 83 with front panel 83f and

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top surface 83*t*. Upstanding pins 85 are mounted on top surface 83*t* and there is an opening 83*o* in top surface 83*t* to receive central core prong 86 of central core unit 88 (see FIG. 20). Device 82 has a crank 81 pivoted on pin 80 in front panel 83*f*. Crank 81 carries projecting cam pin 78 which projects through front face slot 75 into prong slot 86*s*. Pattern (P) is positioned on core cluster 73. Core 73 includes central core unit 88 which in turn also includes ring body 89 and central core 91. Ring body 89 includes holes 90 for receiving the pins 95*a-f* of core sections 94*a-c* (see FIGS. 18, 19 and also FIGS. 5 and 7).

In the operation of mold apparatus 50 and portable associated device 83, upon wax or other mold material injection into engaged mold sections 52, 53 through sprue hole (not shown) together with core pin 58 in place, pin 58 is withdrawn and upper platen 51 with its attached mold section 52, after a proper time delay, are raised. Preferably, this step of mold apparatus 50 and subsequent steps are automatically operated in a computer programmed control sequence. As upper mold section 52 moves up and away from lower mold slide section 70, mold slide section 70 is free under spring urging to move away from the molded pattern (P). Next, the operator grasps handle 53*h* and at the same time opens air handle valve 53*v* (FIG. 10) causing air to flow out lower mold bottom holes 76 providing an air cushion between the lower mold bottom surface 74 and the press table surface (S).

Lower mold section 53 is then pulled with ease on air cushion by the operator in direction D (FIG. 10). As lower mold section 53 moves toward stop piece 65, lower mold plate 63 is lifted due to the camming action of cross bar 59 with its stud ends 60, 61 as such stud ends 60, 61 are cammed upwardly in guide slots 68, 68*b*, 69*a*, 69*b* and 71*a*, 71*b* causing core unit 88 to rise up (FIG. 12*a*). The sprue (not shown) is severed as core unit 88 rises. When stud ends 60, 61 reach the ends of slots 69*a*, 69*b* they drop down through recesses 87*a*, 87*b* under action of spring-loaded plate 63. Stud ends 60, 61 are then free to move under slots 71*a*, 71*b* as mold section 53 is pushed by the operator back to its position for mating with upper mold 52. Core unit 88, having been raised by plate 63, is then readily grasped by the operator for removal. As core unit 88 is extracted the injection sprue is sheared off. Lubricant or cold air may be sprayed on the hosel pin 58 to reduce sticking.

The operator then places the wax pattern (P) with the internal core cluster 73 on core cluster mount device 82. The center core 88 is extracted by operating crank 81. The projection pin 78 of crank 81 engages slot 86*s* of prong 86 to cause prong 86 to move downwardly as crank 81 is pushed down. As prong 86 is lowered by crank action, ring holes go accommodate upstanding pins 85 permitting downward movement until ring center cluster 89 is seated on device top surface 83*f*. Center core 88 is thereby separated from pattern (P) without the operator grasping pattern (P) which could cause its deformation. The remaining core sections are then readily removed by hand and places them on a pedestal for assembly.

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We claim:

1. A method of molding a pattern using a multiple section mold including an upper mold section, a lower mold section with a slide piece and a core cluster

- a. vertically reciprocating the upper mold section away from the lower mold section;
- b. positioning the lower mold section including the slide piece and the core cluster on a horizontal control surface for translation movement;
- c. translating the lower mold section from a first molding position under the upper mold section to a second assembly position;
- d. causing a fluid cushion to be present under the lower mold section during translation;
- e. moving the lower mold section under and then engaging it to the upper mold section;
- f. injecting material into the mold;
- g. thereafter translating the lower mold section on the horizontal control surface to its second position after elevating the upper mold section;
- h. removing the core cluster; and
- i. placing the core cluster on a center core separation device.

2. The method of claim 1 having in addition the steps of

- a. providing track means for controlling and guiding the lower mold section during such translation and moving the lower mold section along the track means;
- b. providing guide means along the track means; and
- c. placing cam means on the lower mold section which ride in engagement with the guide means to raise the core cluster.

3. The method of claim 1 having in addition the steps of

- a. placing in the core Cluster a center core unit;
- b. mounting the core cluster in the center core unit; and
- c. separating the center core unit from the core cluster.

4. The method of claim 1 in which a sprue is formed on the pattern and shearing off the sprue when the translatable lower mold section is moved from its first molding, position to the second assembly position.

5. The method of claim 1 in addition providing a magnet in the lower mold section to attract the core cluster to the lower mold section.

6. A method for forming a mold pattern comprising

- a. providing an upper mold section;
- b. providing a lower mold section transportable along a surface from a molding position to a remote position;
- c. further providing a fluid cushion between the lower mold section and said surface;
- d. causing a core cluster to be positioned in the lower mold section; and
- e. supplying a guide track means for guiding the lower mold section during its transport from said molding position to said remote position for removal of the core cluster.

* * * * *

CIVIL COVER SHEET

The JS 44 civil cover sheet and the information contained herein neither replace nor supplement the filing and service of pleadings or other papers as required by law, except as provided by local rules of court. This form, approved by the Judicial Conference of the United States in September 1974, is required for the use of the Clerk of Court for the purpose of initiating the civil docket sheet. (SEE INSTRUCTIONS ON NEXT PAGE OF THIS FORM.)

I. (a) PLAINTIFFS

TIMOTHY BARRETT, Individually
and On Behalf of All Others Similarly Situated

(b) County of Residence of First Listed Plaintiff San Diego County
(EXCEPT IN U.S. PLAINTIFF CASES)

(c) Attorneys (Firm Name, Address, and Telephone Number)

Abbas Kazerounian, Esq. (SBN 249203)
245 Fischer Avenue, Unit D1, Costa Mesa CA 92626
(800) 400-6808

DEFENDANTS

MILWAUKEE ELECTRIC TOOL, INC., d/b/a STILETTO TOOLS, INC.

County of Residence of First Listed Defendant Waukesha County
(IN U.S. PLAINTIFF CASES ONLY)

NOTE: IN LAND CONDEMNATION CASES, USE THE LOCATION OF
THE TRACT OF LAND INVOLVED.

Attorneys (If Known)

'14CV1804 JAH DHB

II. BASIS OF JURISDICTION (Place an "X" in One Box Only)

- ☐ 1 U.S. Government Plaintiff
- ☒ 3 Federal Question (U.S. Government Not a Party)
- ☐ 2 U.S. Government Defendant
- ☒ 4 Diversity (Indicate Citizenship of Parties in Item III)

-dlg

III. CITIZENSHIP OF PRINCIPAL PARTIES (Place an "X" in One Box for Plaintiff and One Box for Defendant)

- | | PTF | DEF | | PTF | DEF |
|---|---------------------------------------|----------------------------|---|----------------------------|---------------------------------------|
| Citizen of This State | <input checked="" type="checkbox"/> 1 | <input type="checkbox"/> 1 | Incorporated or Principal Place of Business In This State | <input type="checkbox"/> 4 | <input type="checkbox"/> 4 |
| Citizen of Another State | <input type="checkbox"/> 2 | <input type="checkbox"/> 2 | Incorporated and Principal Place of Business In Another State | <input type="checkbox"/> 5 | <input checked="" type="checkbox"/> 5 |
| Citizen or Subject of a Foreign Country | <input type="checkbox"/> 3 | <input type="checkbox"/> 3 | Foreign Nation | <input type="checkbox"/> 6 | <input type="checkbox"/> 6 |

IV. NATURE OF SUIT (Place an "X" in One Box Only)

CONTRACT	TORTS	FORFEITURE/PENALTY	BANKRUPTCY	OTHER STATUTES
<input type="checkbox"/> 110 Insurance <input type="checkbox"/> 120 Marine <input type="checkbox"/> 130 Miller Act <input type="checkbox"/> 140 Negotiable Instrument <input type="checkbox"/> 150 Recovery of Overpayment & Enforcement of Judgment <input type="checkbox"/> 151 Medicare Act <input type="checkbox"/> 152 Recovery of Defaulted Student Loans (Excludes Veterans) <input type="checkbox"/> 153 Recovery of Overpayment of Veteran's Benefits <input type="checkbox"/> 160 Stockholders' Suits <input type="checkbox"/> 190 Other Contract <input type="checkbox"/> 195 Contract Product Liability <input type="checkbox"/> 196 Franchise	PERSONAL INJURY <input type="checkbox"/> 310 Airplane <input type="checkbox"/> 315 Airplane Product Liability <input type="checkbox"/> 320 Assault, Libel & Slander <input type="checkbox"/> 330 Federal Employers' Liability <input type="checkbox"/> 340 Marine <input type="checkbox"/> 345 Marine Product Liability <input type="checkbox"/> 350 Motor Vehicle <input type="checkbox"/> 355 Motor Vehicle Product Liability <input type="checkbox"/> 360 Other Personal Injury <input type="checkbox"/> 362 Personal Injury - Medical Malpractice PERSONAL INJURY <input type="checkbox"/> 365 Personal Injury - Product Liability <input type="checkbox"/> 367 Health Care/Pharmaceutical Personal Injury Product Liability <input type="checkbox"/> 368 Asbestos Personal Injury Product Liability PERSONAL PROPERTY <input type="checkbox"/> 370 Other Fraud <input type="checkbox"/> 371 Truth in Lending <input type="checkbox"/> 380 Other Personal Property Damage <input type="checkbox"/> 385 Property Damage Product Liability	<input type="checkbox"/> 625 Drug Related Seizure of Property 21 USC 881 <input type="checkbox"/> 690 Other LABOR <input type="checkbox"/> 710 Fair Labor Standards Act <input type="checkbox"/> 720 Labor/Management Relations <input type="checkbox"/> 740 Railway Labor Act <input type="checkbox"/> 751 Family and Medical Leave Act <input type="checkbox"/> 790 Other Labor Litigation <input type="checkbox"/> 791 Employee Retirement Income Security Act IMMIGRATION <input type="checkbox"/> 462 Naturalization Application <input type="checkbox"/> 465 Other Immigration Actions	<input type="checkbox"/> 422 Appeal 28 USC 158 <input type="checkbox"/> 423 Withdrawal 28 USC 157 PROPERTY RIGHTS <input type="checkbox"/> 820 Copyrights <input type="checkbox"/> 830 Patent <input type="checkbox"/> 840 Trademark SOCIAL SECURITY <input type="checkbox"/> 861 HIA (1395ff) <input type="checkbox"/> 862 Black Lung (923) <input type="checkbox"/> 863 DIWC/DIWW (405(g)) <input type="checkbox"/> 864 SSID Title XVI <input type="checkbox"/> 865 RSI (405(g)) FEDERAL TAX SUITS <input type="checkbox"/> 870 Taxes (U.S. Plaintiff or Defendant) <input type="checkbox"/> 871 IRS—Third Party 26 USC 7609	<input type="checkbox"/> 375 False Claims Act <input type="checkbox"/> 400 State Reapportionment <input type="checkbox"/> 410 Antitrust <input type="checkbox"/> 430 Banks and Banking <input type="checkbox"/> 450 Commerce <input type="checkbox"/> 460 Deportation <input type="checkbox"/> 470 Racketeer Influenced and Corrupt Organizations <input type="checkbox"/> 480 Consumer Credit <input type="checkbox"/> 490 Cable/Sat TV <input type="checkbox"/> 850 Securities/Commodities/Exchange <input checked="" type="checkbox"/> 890 Other Statutory Actions <input type="checkbox"/> 891 Agricultural Acts <input type="checkbox"/> 893 Environmental Matters <input type="checkbox"/> 895 Freedom of Information Act <input type="checkbox"/> 896 Arbitration <input type="checkbox"/> 899 Administrative Procedure Act/Review or Appeal of Agency Decision <input type="checkbox"/> 950 Constitutionality of State Statutes
REAL PROPERTY <input type="checkbox"/> 210 Land Condemnation <input type="checkbox"/> 220 Foreclosure <input type="checkbox"/> 230 Rent Lease & Ejectment <input type="checkbox"/> 240 Torts to Land <input type="checkbox"/> 245 Tort Product Liability <input type="checkbox"/> 290 All Other Real Property	CIVIL RIGHTS <input type="checkbox"/> 440 Other Civil Rights <input type="checkbox"/> 441 Voting <input type="checkbox"/> 442 Employment <input type="checkbox"/> 443 Housing/Accommodations <input type="checkbox"/> 445 Amer. w/Disabilities - Employment <input type="checkbox"/> 446 Amer. w/Disabilities - Other <input type="checkbox"/> 448 Education PRISONER PETITIONS Habeas Corpus: <input type="checkbox"/> 463 Alien Detainee <input type="checkbox"/> 510 Motions to Vacate Sentence <input type="checkbox"/> 530 General <input type="checkbox"/> 535 Death Penalty Other: <input type="checkbox"/> 540 Mandamus & Other <input type="checkbox"/> 550 Civil Rights <input type="checkbox"/> 555 Prison Condition <input type="checkbox"/> 560 Civil Detainee - Conditions of Confinement			

V. ORIGIN (Place an "X" in One Box Only)

- ☒ 1 Original Proceeding
- ☐ 2 Removed from State Court
- ☐ 3 Remanded from Appellate Court
- ☐ 4 Reinstated or Reopened
- ☐ 5 Transferred from Another District (specify)
- ☐ 6 Multidistrict Litigation

VI. CAUSE OF ACTION

Cite the U.S. Civil Statute under which you are filing (Do not cite jurisdictional statutes unless diversity):

CALIFORNIA BUS. & PROF. CODE §§ 17200 ET SEQ.; BUS. & PROF. CODE §§ 17500 ET SEQ. ; 28 : 1332

Brief description of cause:

False Advertising and Unfair Business Practices

dlg

VII. REQUESTED IN COMPLAINT:

☒ CHECK IF THIS IS A CLASS ACTION UNDER RULE 23, F.R.Cv.P.

DEMAND \$
5,000,000.00

CHECK YES only if demanded in complaint:

JURY DEMAND: ☒ Yes ☐ No

VIII. RELATED CASE(S) IF ANY

(See instructions):

JUDGE

DOCKET NUMBER

DATE

07/25/2014

SIGNATURE OF ATTORNEY OF RECORD

/s/ Abbas Kazerounian

FOR OFFICE USE ONLY

RECEIPT #

AMOUNT

APPLYING IFP

JUDGE

MAG. JUDGE

INSTRUCTIONS FOR ATTORNEYS COMPLETING CIVIL COVER SHEET FORM JS 44

Authority For Civil Cover Sheet

The JS 44 civil cover sheet and the information contained herein neither replaces nor supplements the filings and service of pleading or other papers as required by law, except as provided by local rules of court. This form, approved by the Judicial Conference of the United States in September 1974, is required for the use of the Clerk of Court for the purpose of initiating the civil docket sheet. Consequently, a civil cover sheet is submitted to the Clerk of Court for each civil complaint filed. The attorney filing a case should complete the form as follows:

- I.(a) Plaintiffs-Defendants.** Enter names (last, first, middle initial) of plaintiff and defendant. If the plaintiff or defendant is a government agency, use only the full name or standard abbreviations. If the plaintiff or defendant is an official within a government agency, identify first the agency and then the official, giving both name and title.
 - (b) County of Residence.** For each civil case filed, except U.S. plaintiff cases, enter the name of the county where the first listed plaintiff resides at the time of filing. In U.S. plaintiff cases, enter the name of the county in which the first listed defendant resides at the time of filing. (NOTE: In land condemnation cases, the county of residence of the "defendant" is the location of the tract of land involved.)
 - (c) Attorneys.** Enter the firm name, address, telephone number, and attorney of record. If there are several attorneys, list them on an attachment, noting in this section "(see attachment)".
- II. Jurisdiction.** The basis of jurisdiction is set forth under Rule 8(a), F.R.Cv.P., which requires that jurisdictions be shown in pleadings. Place an "X" in one of the boxes. If there is more than one basis of jurisdiction, precedence is given in the order shown below.
- United States plaintiff. (1) Jurisdiction based on 28 U.S.C. 1345 and 1348. Suits by agencies and officers of the United States are included here.
- United States defendant. (2) When the plaintiff is suing the United States, its officers or agencies, place an "X" in this box.
- Federal question. (3) This refers to suits under 28 U.S.C. 1331, where jurisdiction arises under the Constitution of the United States, an amendment to the Constitution, an act of Congress or a treaty of the United States. In cases where the U.S. is a party, the U.S. plaintiff or defendant code takes precedence, and box 1 or 2 should be marked.
- Diversity of citizenship. (4) This refers to suits under 28 U.S.C. 1332, where parties are citizens of different states. When Box 4 is checked, the citizenship of the different parties must be checked. (See Section III below; **NOTE: federal question actions take precedence over diversity cases.**)
- III. Residence (citizenship) of Principal Parties.** This section of the JS 44 is to be completed if diversity of citizenship was indicated above. Mark this section for each principal party.
- IV. Nature of Suit.** Place an "X" in the appropriate box. If the nature of suit cannot be determined, be sure the cause of action, in Section VI below, is sufficient to enable the deputy clerk or the statistical clerk(s) in the Administrative Office to determine the nature of suit. If the cause fits more than one nature of suit, select the most definitive.
- V. Origin.** Place an "X" in one of the six boxes.
- Original Proceedings. (1) Cases which originate in the United States district courts.
- Removed from State Court. (2) Proceedings initiated in state courts may be removed to the district courts under Title 28 U.S.C., Section 1441. When the petition for removal is granted, check this box.
- Remanded from Appellate Court. (3) Check this box for cases remanded to the district court for further action. Use the date of remand as the filing date.
- Reinstated or Reopened. (4) Check this box for cases reinstated or reopened in the district court. Use the reopening date as the filing date.
- Transferred from Another District. (5) For cases transferred under Title 28 U.S.C. Section 1404(a). Do not use this for within district transfers or multidistrict litigation transfers.
- Multidistrict Litigation. (6) Check this box when a multidistrict case is transferred into the district under authority of Title 28 U.S.C. Section 1407. When this box is checked, do not check (5) above.
- VI. Cause of Action.** Report the civil statute directly related to the cause of action and give a brief description of the cause. **Do not cite jurisdictional statutes unless diversity.** Example: U.S. Civil Statute: 47 USC 553 Brief Description: Unauthorized reception of cable service
- VII. Requested in Complaint.** Class Action. Place an "X" in this box if you are filing a class action under Rule 23, F.R.Cv.P.
- Demand. In this space enter the actual dollar amount being demanded or indicate other demand, such as a preliminary injunction.
- Jury Demand. Check the appropriate box to indicate whether or not a jury is being demanded.
- VIII. Related Cases.** This section of the JS 44 is used to reference related pending cases, if any. If there are related pending cases, insert the docket numbers and the corresponding judge names for such cases.

Date and Attorney Signature. Date and sign the civil cover sheet.