UNITED STATES DISTRICT COURT
DISTRICT OF CONNECTICUT

CHANG HSUEH-O HSU, Plaintiff, v. THORSEN TOOL COMPANY, INC., U.S. HOLDINGS COMPANY, INC., HARBOR FREIGHT USA TOOLS, INC., and DOES 1-10, Defendants.	2013 Civ. **Complaint for Patent Infringement**

Plaintiff, Chang Hsueh-O Hsu, by and through her attorneys, states the following as her complaint against defendants Thorsen Tool Company, Inc., U.S. Holdings Corporation, Harbor Freight USA Tools, Inc. and Does 1-10 (each a defendant, collectively referred to hereinafter as "Defendants"):

THE PARTIES

1. Plaintiff, Chang Hsueh-O Hsu, is an individual who resides in Taiwan and is the owner of all rights under United States Patent Nos. 8,261,638 (entitled "Hand Tool Adapter") (the "'638 Patent") and 8,307,742 (also) entitled "Hand Tool Adapter") (the "'742 Patent").

2. Upon information and belief, defendant US Holdings Corporation ("Holdings") is a corporation organized and existing under the laws of Texas, and

having a principal place of business at 3406 Lovers Lane in Dallas, Texas that manufactures and distributes and/or sells a device called the "Puck Wrench®" which infringes plaintiff's patent rights, and which is distributed throughout the United States.

3. Upon information and belief, defendant Thorsen Tool Company, Inc. ("Thorsen") is a corporation organized and existing under the laws of Delaware, and having a principal place of business at 1932 South Lynx Avenue in Ontario, California that manufactures and distributes and/or sells a device called the "Puck Wrench®" which infringes plaintiff's patent rights, and which is distributed throughout the United States.

4. Upon information and belief, defendant Harbor Freight Tools USA, Inc. ("Harbor Freight") is a corporation organized and existing under the laws of Delaware, and having a principal place of business at 26541 Agoura Road in California that manufactures and distributes and/or sells a device called the "Universal Grip Wrench" which infringes plaintiff's patent rights. Harbor Freight does business within this judicial district through numerous retail outlets located in the state of Connecticut.

5. Plaintiff has information and relying thereon believes that the defendants sued herein as Doe Defendants 1-5 are persons or business entities who are variously retailers, distributors, manufacturers, importers, exporters and/or wholesalers of infringing products, the same or similar to the products complained

of herein, and sold, offered for sale, imported and/or [co]-manufactured, and sold the same, including sales to the specifically named defendants; and manufacture such infringing products and/or obtain such products, directly or indirectly, from the same common sources and suppliers of such products to Holdings, Thorsen and Harbor Freight other Doe Defendants as detailed herein, and others.

6. Plaintiff is further informed and relying thereon believes that the defendants sued herein as Doe Defendants 6-10 are persons or business entities who are variously manufacturers, sellers, agents, representatives, intermediaries or affiliates who sold, offered for sale, imported and/or [co]-manufactured infringing products, the same or similar to the products complained of herein, and sold the same directly or indirectly to Holdings, Thorsen and Harbor Freight and Doe Defendants 1-5 as detailed herein.

JURISDICTION AND VENUE

7. This is an action for patent infringement. Jurisdiction is founded on the existence of a federal question arising under the Acts of Congress relating to Patents, 35 U.S.C. §§ 271; 281-285, and pursuant to 28 U.S.C. §§ 1331 and 1338(a).

8. Venue is proper under 28 U.S.C. §§ 1400(b), as all defendants are corporations regularly doing business and residing in this judicial district.

9. This Court has personal jurisdiction over all defendants because each such defendant has committed acts of infringement in Connecticut by offering for sale,

selling, using and importing products that infringe the '638 and '742 Patents in Connecticut and/or putting products into the stream of commerce which have been sold in Connecticut.

ALLEGATIONS COMMON TO ALL COUNTS

10. On or about January 21, 2013, Hsu, through its Chinese counsel, wrote to Holdings and Thorsen that their Puck Wrench® infringed Hsu's U.S. Patent Nos. 8,261,638 and 8,307,742 and that Holdings and Thorsen should immediately cease and desist from manufacture and sale of the accused Puck Wrench®. Hsu enclosed copies of both the '638 and '742 patents with photographs of Defendants' infringing products as offered for sale and sold by U.S. merchants and online stores.

11. On or about March 21, 2 013, Holdings responded to Hsu's cease and desist letter with the false and deceptive statement that: "U.S. holdings began selling the Thorsen brand Puck Wrench® long before the filing date of (November 12, 2010) of U.S. Patent No. 8,307,742. Therefore, the filing date of U.S. Patent No. 8,307,742 is predated by sales of the Thorsen brand Puck Wrench®, and U.S. Patent No. 8,307,742 is thus invalid."

12. Holdings and Thorsen knew their statement that they began selling their infringing products "long before" the filing date of '742 Patent was false when made. The falsity of the statement is apparent on its face, as under US law (unlike under Chinese law, prior sale is not a defense to patent infringement. Moreover, the

letter from defendants, written by specialized patent counsel, failed to identify any statutory sale bar, apparently because there was no such defense, and such a statement was a misrepresentation of fact in a negotiation by counsel and is in violation of the canons of ethics.

13. Upon information and belief, Holdings and Thorsen did not offer for sale or sell their infringing products more than one year before the November 10, 2010 filing date of the '742 patent. As such, Holdings and Thorsen knowingly and falsely asserted that their alleged sales invalidated the '742 patent due to the one year "on sale" statutory bar, in a transparent and unethical attempt to "slip one past" Chinese counsel.

14. On or about January 21, 2013 Hsu wrote to Harbor Freight that its Universal Grip Wrench infringed Hsu's U.S. Patent Nos. 8,261,638 and 8,307,742 and that Harbor Freight should immediately cease and desist manufacture and sale of the Universal Grip Wrench. Hsu enclosed copies of both the '638 and '742 patents with photographs of Defendants' infringing products as offered for sale and sold by U.S. merchants and online stores.

COUNT ONE
(Against Thorsen, Holdings, Harbor Freight and Does 1-10 for Infringement of U.S. Patent No. 8,261,638)

15. As a cause of action and ground for relief, Plaintiff alleges and incorporates by reference paragraphs 1 through 14 of this complaint as a part of this Count.

16. Plaintiff is the owner of all rights under United States Patent No. 8,261,638 entitled "Hand Tool Adapter" which issued on September 11, 2012 and is directed to a hand tool adapter. A copy of the '638 Patent is attached as Exhibit A.

17. Defendants have imported, manufactured, used, sold, and/or offered for sale hand tool adapters in the United States that infringe the Patent. Despite warning letters from the Plaintiff (Exhibits B and C), such infringement continues. See Exhibits D and Ephotographs of Defendants' "Puck Wrench®" and Universal Grip Wrench which infringe the '638 Patent. Such actions constitute direct, contributory and inducement of infringement of the '638 Patent either literally or under the doctrine of equivalence.

18. Plaintiff has never authorized either of the Defendants at any time to make, use or sell any products covered by the '638 Patent.

19. Plaintiff has been damaged by Defendants' direct, contributory and inducement of infringement of the '638 Patent, whether literally or under the doctrine of equivalence, including, without limitation, lost profits, and/or royalty income, and/or damages on account of convoyed sales, and the Defendants have been unjustly enriched by such infringement, on account of profits and/or convoyed sales.

20. Plaintiff has also suffered irreparable harm by Defendants' infringement of the '638 Patent and will continue to suffer irreparable harm in the future, unless

Defendants are preliminarily and permanently enjoined from infringing the '638 Patent.

21. Defendants have had actual knowledge of the Patent, and their infringement of the Patent has been, and continues to be, willful, wanton, malicious and deliberate. The circumstances of such infringement warrant finding the above-complained of infringement to be an exceptional one.

COUNT TWO
(Against Thorsen, Holdings, Harbor Freight and Does 1-10 for Infringement of U.S. Patent No. 8,307,742)

22. As a cause of action and ground for relief, Plaintiff alleges and incorporates by reference paragraphs 1 through 21 of this complaint as a part of this Count.

23. Plaintiff is the owner of all rights under United States Patent No. 8,307,742 entitled "Hand Tool Adapter" which issued on November, 2012 and is directed to a hand tool adapter. A copy of the '742 Patent is attached as Exhibit F.

24. Defendants have imported, manufactured, used, sold, and/or offered for sale hand tool adapters in the United States that infringe the Patent.

25. Despite warning letters from the Plaintiff (Exhibits B and C), such infringement continues. See Exhibits D and E, photographs of Defendants' "Puck Wrench®" and Universal Grip Wrench which infringe the '742 Patent. Such actions constitute direct, contributory and inducement of infringement of the '742 Patent either literally or under the doctrine of equivalence.

26. Plaintiff has never authorized either of the Defendants at any time to make, use or sell any products covered by the '742 Patent.

27. Plaintiff has been damaged by Defendants' direct, contributory and inducement of infringement of the '742 Patent whether literally or under the doctrine of equivalence, including, without limitation, lost profits, and/or royalty income, and/or damages on account of convoyed sales, and the Defendants have been unjustly enriched by such infringement, on account of profits and/or convoyed sales.

28. Plaintiff has also suffered irreparable harm by Defendants' infringement of the '742 Patent and will continue to suffer irreparable harm in the future, unless Defendants are preliminarily and permanently enjoined from infringing the '742 Patent.

29. Defendants have had actual knowledge of the '742 Patent, and their infringement of the '742 Patent has been, and continues to be, willful, wanton, malicious and deliberate. The circumstances of such infringement warrant finding the above-complained of infringement to be an exceptional one.

COUNT THREE
(Against Thorsen, Holdings, Harbor Freight and Does 1-10 for Inducing Patent Infringement of U.S. Patent No. 8,261,638)

30. As a cause of action and ground for relief, Plaintiff alleges and incorporates by reference paragraphs 1 through 29 of this complaint as a part of this Count.

31. Upon information and belief, Defendants have actively induced infringement of the '638 Patent by importing into the United States hand tools which infringe the '638 Patent and Defendants are accordingly liable as contributory infringers of the Patent pursuant to 35 USC 271 (b).

32. Such actions have damaged plaintiff on account of lost sales, loss of royalties and loss of convoyed sales, and have unjustly enriched and profited defendants.

COUNT FOUR
(Against Thorsen, Holdings, Harbor Freight and Does 1-10 for Inducing Patent Infringement of U.S. Patent No. 8,307,742)

33. As a cause of action and ground for relief, Plaintiff alleges and incorporates by reference paragraphs 1 through 32 of this complaint as a part of this Count.

34. Upon information and belief, Defendants have actively induced infringement of the '742 Patent by importing into the United States hand tools which infringe the '742 Patent and Defendants are accordingly liable as contributory infringers of the Patent pursuant to 35 USC 271 (b).

35. Such actions have damaged plaintiff on account of lost sales, loss of royalties and loss of convoyed sales, and have unjustly enriched and profited defendants.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff prays for the following relief:

1. A judgment that the '638 and '742 Patents are valid and that Defendants have infringed the Patents.

2. A permanent injunction enjoining and restraining Defendants, their officers, directors, agents, servants, employees, attorneys, and all others acting under or through them, directly or indirectly from infringing patent rights of the plaintiff;

3. A judgment and order requiring Defendants to pay damages, including damages under 35 U.S.C. § 284, with prejudgment interest;

4. An order requiring Defendants to recall from its distributors, wholesalers, retailers and customers any product found to infringe the Patent.

5. An order requiring Defendants to be required to account to Plaintiff for any and all profits derived by Defendants from the sale of its infringing products and/or a reasonable royalty and for all other damages sustained by Plaintiff by reason of said acts of infringement complained of herein.

6. For a judgment according to the circumstances of the case and pursuant to 35 U.S.C § 284 for such sum above the amount found in actual damages, but not to exceed three times such amount as the Court may deem just.

7. A judgment and order directing Defendants to pay the costs of this action (including all disbursements) and attorneys' fees pursuant to 35 U.S.C. § 285; and

8. Such other and further relief as this Court may deem just and equitable.

Dated: July 17, 2013

By: _____

Anthony H. Handal (CT 03837)
Handal & Morofsky
Attorneys for Plaintiff
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Fairfield, Connecticut 06825
Tel. 917 880 0811
handal@HandalGlobal.com

DEMAND FOR JURY TRIAL

Plaintiff hereby demands a trial by jury of all issues so triable.

Dated: July 17, 2013

By: _____

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Handal & Morofsky
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Tel. 917 880 0811
handal@HandalGlobal.com

EXHIBIT A

US008261638B2

(12) **United States Patent**
Hsu

(10) **Patent No.: US 8,261,638 B2**
(45) **Date of Patent: Sep. 11, 2012**

(54) **HAND TOOL ADAPTER**

(76) Inventor: **Chang Hsueh-O Hsu**, Taichung (TW)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 331 days.

(21) Appl. No.: **12/756,864**

(22) Filed: **Apr. 8, 2010**

(65) **Prior Publication Data**

US 2011/0247464 A1 Oct. 13, 2011

(51) **Int. Cl.**

B25B 13/06	(2006.01)
B25B 23/16	(2006.01)
B25G 1/10	(2006.01)

(52) **U.S. Cl.** **81/124.4**; 81/177.2

(58) **Field of Classification Search** 81/124.4 124.7, 81/125.1, 177.2; D8/29

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

226,582	A *	4/1880	Miller	81/124.4
D53,597	S *	7/1919	Macmann	D8/28
D103,579	S *	3/1937	McNaught	D8/28
4,056,020	A *	11/1977	Coviello	81/177.2
4,727,782	A *	3/1988	Yang	81/124.4
6,029,547	A *	2/2000	Eggert et al.	81/124.6
6,257,107	B1 *	7/2001	Chang et al.	81/467
6,286,395	B1 *	9/2001	Frazier	81/60
6,314,841	B1 *	11/2001	Burk et al	81/125.1
6,382,054	B1 *	5/2002	Kirk	81/124.4
6,408,723	B1 *	6/2002	Zurbuchen	81/119
6,962,098	B2 *	11/2005	Eggert et al	81/124.6
7,305,907	B2 *	12/2007	Burwell	81/60
2002/0011136	A1 *	1/2002	Eggert et al.	81/125.1
2004/0099102	A1 *	5/2004	Vaughan	81/124.4
2004/0177733	A1 *	9/2004	Peters	81/490
2005/0261784	A1 *	11/2005	Erb	623/65
2010/0011915	A1 *	1/2010	Badger	81/60

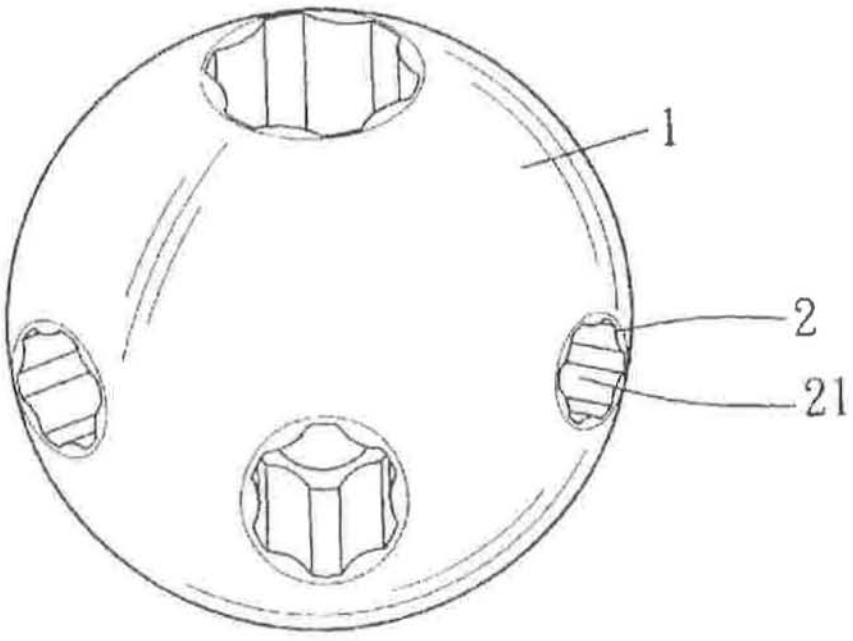
* cited by examiner

Primary Examiner David B Thomas

(57) **ABSTRACT**

A hand tool adapter of the present invention includes a plastic main body and at least six metallic sockets. The main body is formed with at least six holes, and the sockets are fixedly received in the holes respectively. Each socket has a non-circular bore whose axial vector is different those of the bores of the other sockets. Further, each bore has a dimension different from those of the other bores.

9 Claims, 9 Drawing Sheets



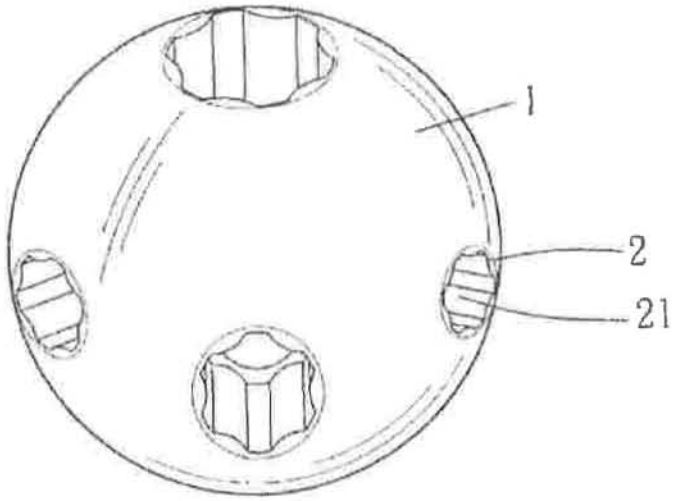


FIG. 1

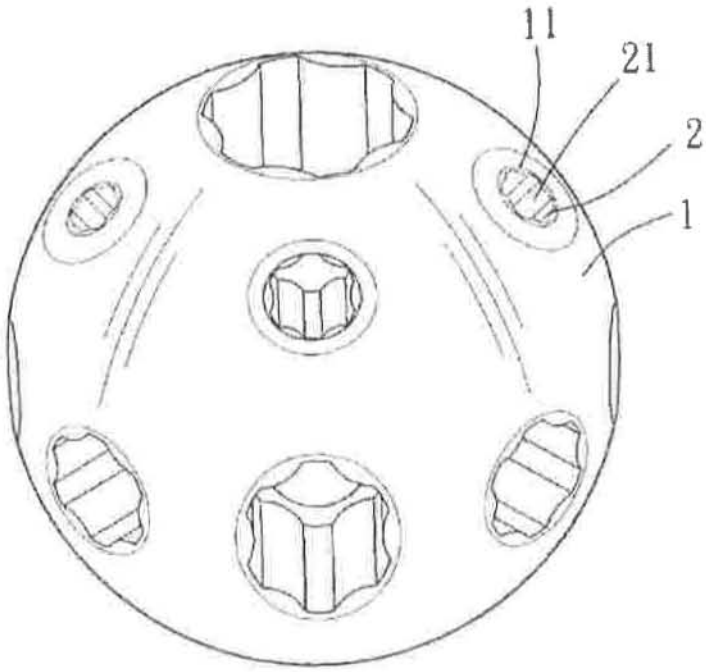


FIG. 2

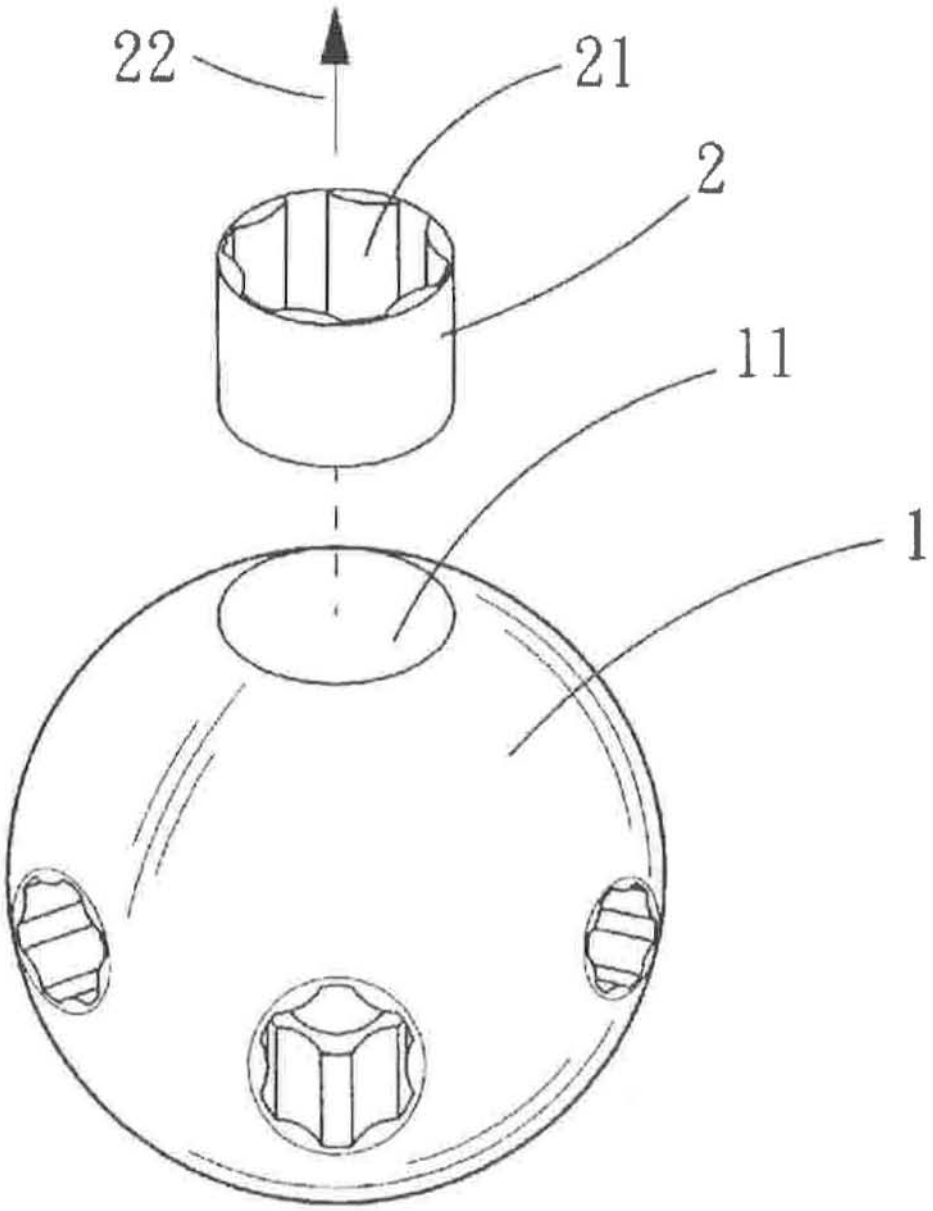


FIG. 3

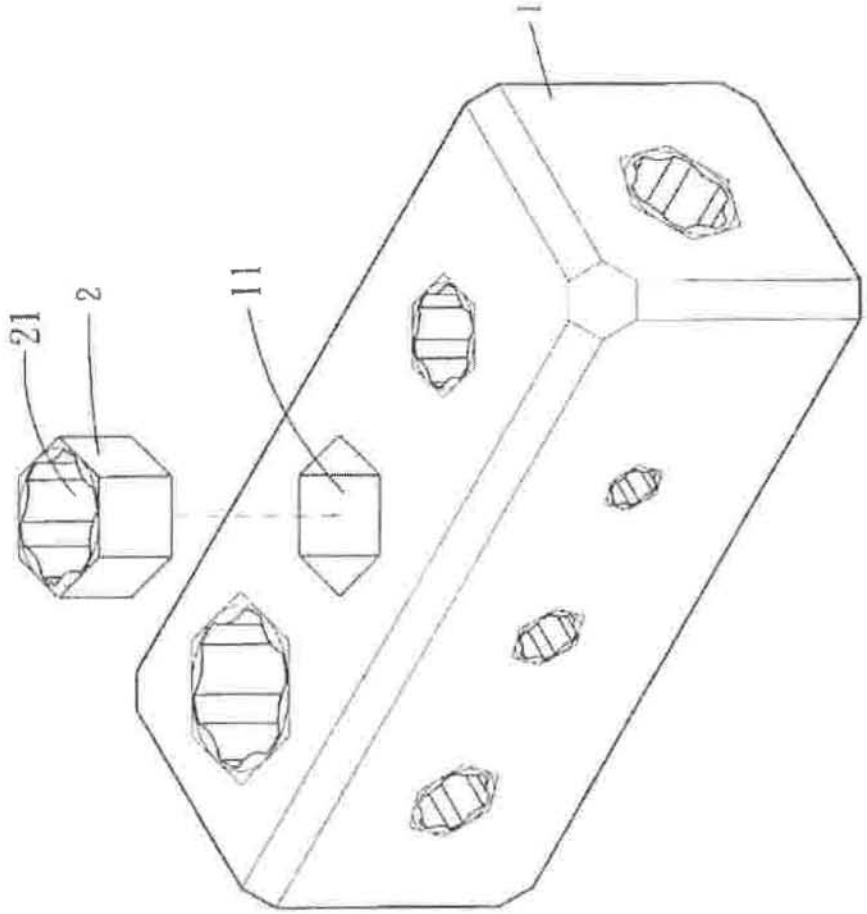


FIG. 4

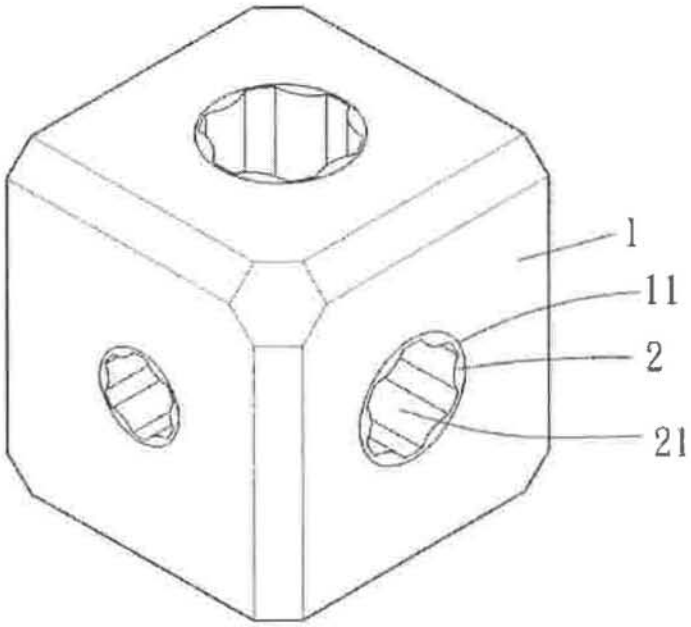


FIG. 5

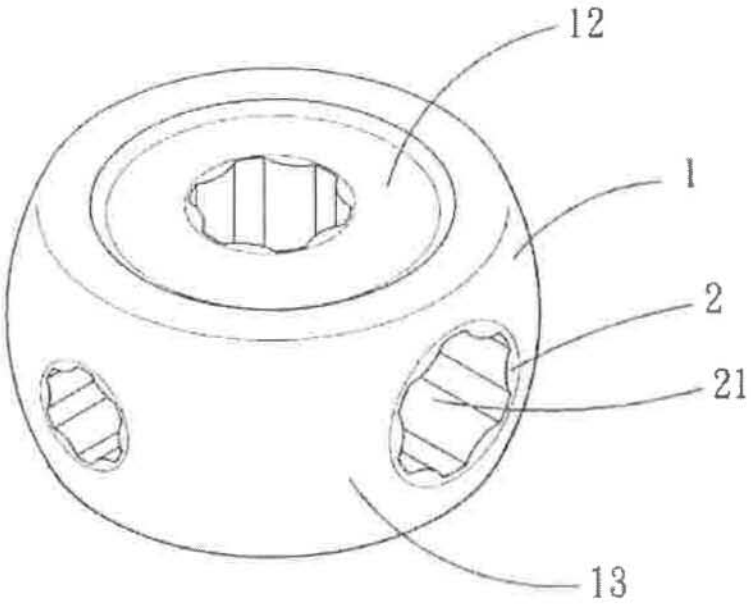


FIG. 6

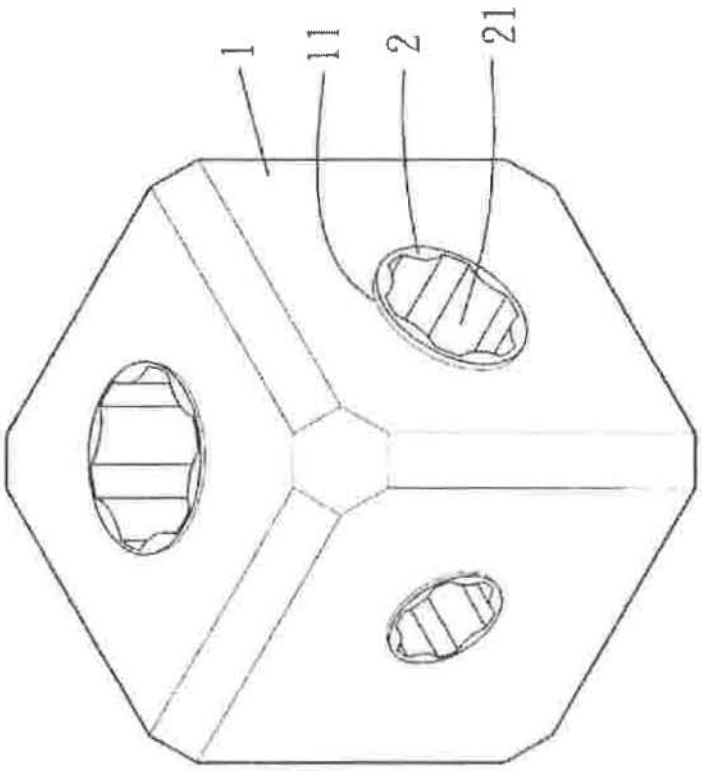


FIG. 7

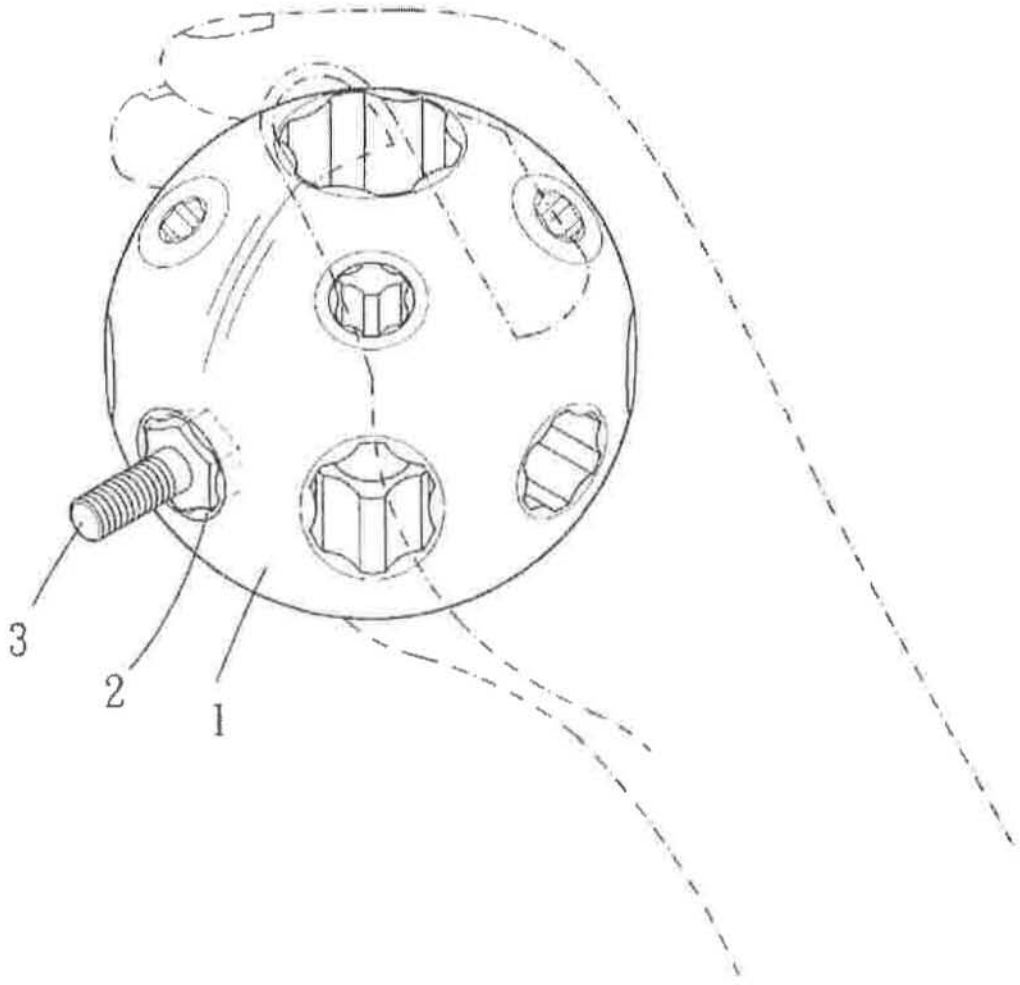


FIG. 8

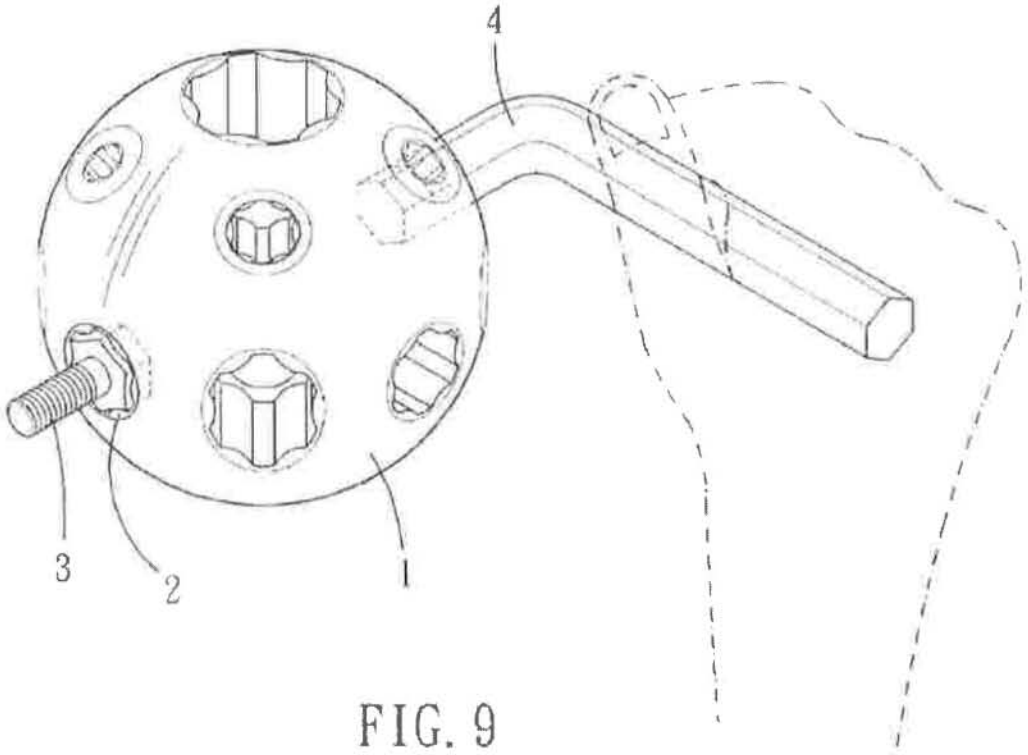


FIG. 9

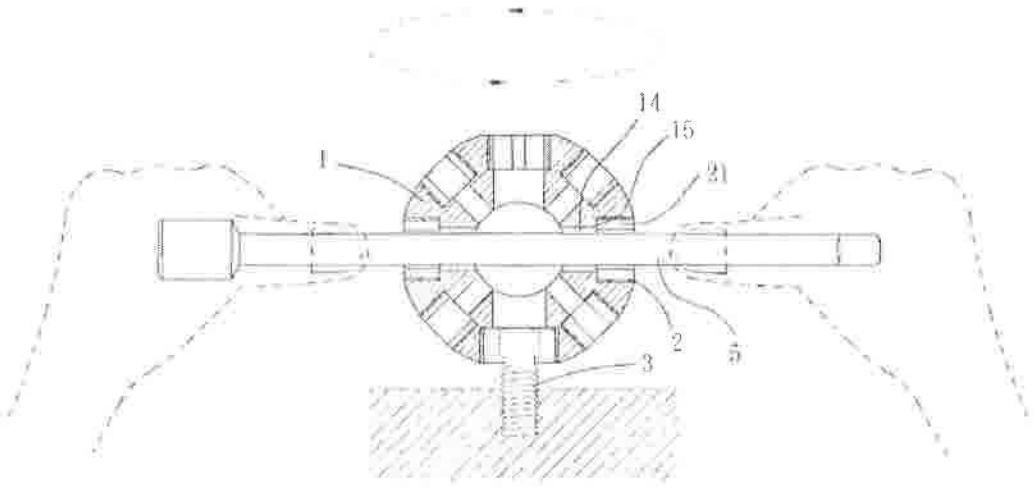


FIG. 10

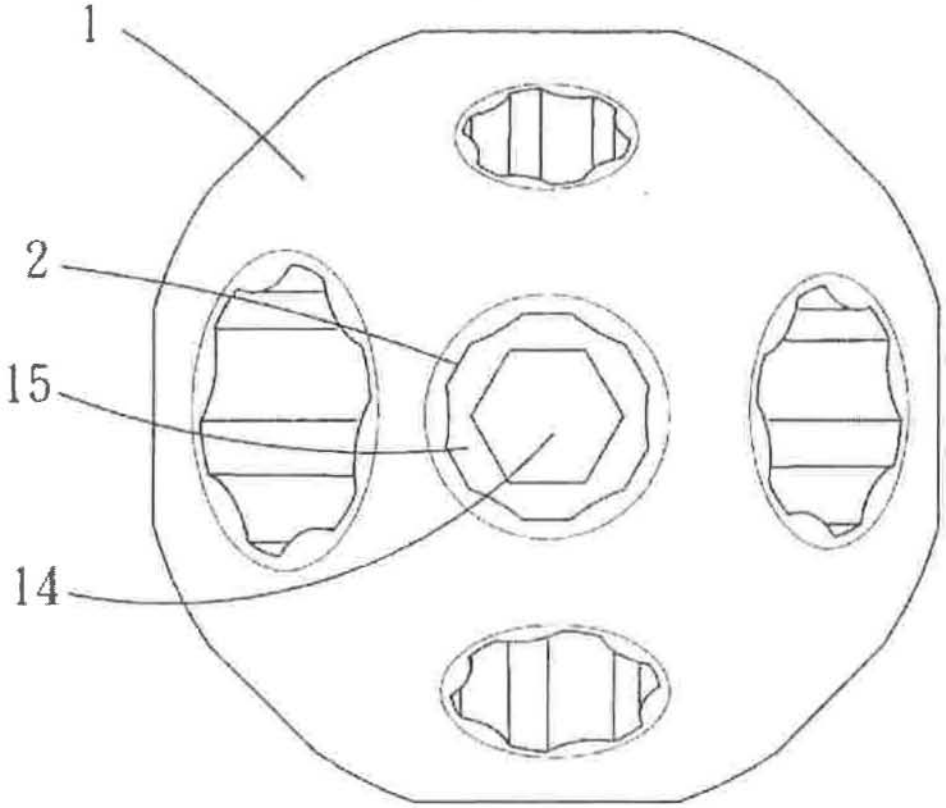


FIG. 11

HAND TOOL ADAPTER

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to a hand tool adapter.

2. Description of the Prior Art

As disclosed in TW M257924 and TW 437519, a conventional hand tool can drive a screw or a nut to rotate for fastening purposes. Another hand tool as disclosed in TW M361408 provides a ratchet mechanism whose axis can be adjusted. However, the driving portion thereof has fixed dimension. Thus it requires several hand tools in order to drive workpieces with different dimensions. Accordingly, adapters are arisen to mitigate such disadvantages. Nevertheless, it still requires several adapters in order to correspond to workpieces with different dimensions.

SUMMARY OF THE INVENTION

The main object of the present invention is to provide an adapter which can correspond to workpieces with different dimensions.

To achieve the above and other objects, a hand tool adapter of the present invention includes a plastic main body and at least six metallic sockets. The main body is formed with at least six holes, and the sockets are fixedly received in the holes respectively. Each socket has a non-circular bore whose axial vector is different those of the bores of the other sockets. Further, each bore has a dimension different from those of the other bores.

The present invention will become more obvious from the following description when taken in connection with the accompanying drawings, which show, for purpose of illustrations only, the preferred embodiment(s) in accordance with the present invention.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a perspective drawing showing an adapter of the present invention;

FIG. **2** is a perspective drawing showing another adapter of the present invention;

FIG. **3** is a breakdown drawing showing an adapter of the present invention;

FIG. **4** is a perspective drawing showing yet another adapter of the present invention;

FIG. **5** is a perspective drawing showing yet another adapter of the present invention;

FIG. **6** is a perspective drawing showing yet another adapter of the present invention;

FIG. **7** is a perspective drawing showing yet another adapter of the present invention;

FIG. **8** is a drawing showing a user using an adapter of the present invention;

FIG. **9** is a drawing showing a user using an adapter of the present invention;

FIG. **10** is a drawing showing a user using an adapter of the present invention;

FIG. **11** is a drawing showing an adapter with a non-circular through hole of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Please refer to FIG. **1** and FIG. **2**. A hand tool adapter of the present invention includes a main body **1** and six or more than six sockets **2**.

Please refer to FIG. **3**. The main body **1** is made from plastic, and preferably from glass-fiber-reinforced plastic. The main body **1** is formed with at least six holes **11**. The cross sections of the holes **11** may be rounded or non-circular, e.g. hexagonal as shown in FIG. **4**. The main body **1** itself may be ball-shaped, cuboid or cubic as shown in FIG. **5**. Thus the main body **1** has six surfaces, each of which is formed with at least one hole **11**. As shown in FIG. **6**, the main body **1** may also be a cylinder and thus has a top surface **12**, a bottom surface and an annular side surface **13**. The top surface **12** is formed with one of the hole, the bottom surface is formed with another hole, and the side surface **13** is formed with the other four holes.

The sockets **2** are made of metallic material to have better mechanical strength. Each socket **2** has a contour corresponding to the cross section of its corresponding hole **11** so that the socket **2** can be fixedly received therein. Each socket **2** defines a non-circular bore **21**, which has an axial vector **22** going from the inside of the main body **1** toward the outside of the main body **1**. The axial vectors **22** of the bores **21** are different from one another. Furthermore, each bore **21** has a dimension different from those of the other bores **21**. In the present embodiment, every two opposite bores **21** are coaxial. The sockets **2** may flush with their corresponding surfaces of the main body **1**, or they may also be slightly protrusive from the surfaces as shown in FIG. **7**, i.e. each hole has a depth smaller than an axial length of its corresponding socket.

Please refer to FIG. **8**. The adapter can be directly used to drive a screw **3** or the like. More specifically, the screw **3** is engaged with one of the sockets **2**, and the user turns the main body **1** with his/her bare hand so that the screw **3** can be turned simultaneously. Please refer to FIG. **9**. Another hand tool **4** can be used to connect to another socket, thus the user can drive the main body **1** to rotate with the hand tool **4**.

Please refer to FIG. **10**. The main body **1** has at least one through hole **14** connecting two opposite coaxial holes, and then the through hole **14** can communicate with the bores **21** of the sockets **2** received in the two opposite holes. Further, the through hole **14** may have a non-circular cross section as shown in FIG. **11**. As such, a rod **5** can be used to insert through the through hole **14** and to drive the main body **1** to rotate. Preferably, a dimension of the through hole **14** is smaller than those of the bores **21** of the sockets received in the two opposite holes, so that two step portions **15** are formed between the through hole **14** and the two bores **21**. As such, the workpiece **3** received in the bore **21** will not fall into the through hole **14**. It is noted that the adapter of the present invention has several sockets for the user to choose from, so as to correspond to workpieces with different dimensions. Further, the user can use the adapter to drive the workpiece bare-handedly or with the help of a hand tool, as disclosed hereinabove.

What is claimed is:

1. A hand tool adapter, comprising a plastic main body, being formed with at least six holes;

at least six metallic sockets, each of which is fixedly received in one of the holes respectively, each socket defining a non-circular bore, each bore having an axial vector, the axial vectors of the bores being different from one another, each bore having a dimension different from those of the other bores, every two opposite bores being coaxial;

wherein the main body has at least one through hole connecting two opposite holes, the through hole communicates with the bores of the sockets received in the two opposite holes.

2. The adapter of claim 1, wherein a dimension of the through hole is smaller than those of the bores of the sockets received in the two opposite holes.

3. The adapter of claim 2, wherein the through hole has a non-circular cross section.

4. The adapter of claim 1, wherein the main body is made from glass-fiber-reinforced plastic.

5. The adapter of claim 1, wherein the main body has a top surface, a bottom surface and an annular side surface, the top surface is formed with one of the holes, the bottom surface is formed with another hole, the side surface is formed with the other holes.

6. The adapter of claim 1, wherein the main body is ball-shaped.

7. The adapter of claim 1, wherein the main body has at least six surfaces, each of which is formed with one of the holes respectively.

8. The adapter of claim 1, wherein a cross section of each hole is non-circular, each socket has a contour corresponding to the cross section of its corresponding hole.

9. The adapter of claim 1, wherein each hole has a depth smaller than an axial length of its corresponding socket.

* * * * *

EXHIBIT B

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Los Angeles, CA 90067
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Fax: 310-956-3106
Email: snakasone@mcguirewoods.com

Our Ref.: GFL01593
U.S. Patent No. 8,261,638 & U.S. Patent No. 8,307,742 Owned by Ms. Chang Hsueh-O Hsu

VIA EMAIL ONLY
January 21, 2013

Dear Sirs,

We are representing Ms. Chang Hsueh-O Hsu of No.152, Nanbei 8th Rd., Da'an Dist., Taichung City 439, Taiwan (R.O.C.) in matters relating to intellectual property.

Ms. Hsu is the owner of US Patent No. 8,261,638 and US Patent No. 8,307,742 (see Enclosures I and II). With a copy of the patents attached showing the relevant details, we would like to draw your attention on the patents of HAND

鉅茂智慧產權有限公司
Tommy & Jason International Intellectual Property Rights Co., Ltd
40878 台中市南屯區五權西路二段666號12樓之4
12F-4, No.666, Sec.2, Wuquan W.Rd., Nantun District, Taichung City 408, Taiwan, (R.O.C)
TEL:886-4-23860999 FAX:886-4-23866430 www.gtptf.com E-mail:gtptf@ms43.hinet.net

TOOL ADAPTER in force since 2010. With the two patents, Ms. Hsu holds the exclusive rights in manufacturing and selling the specific innovative hand tool adapters.

Due to the immense damage caused by patent-infringing products, Ms. Hsu instructed us to conduct a thorough search on the market, and to further commence appropriate legal actions against the infringers if no better settlements sought. Thereafter, it has come to our attention that your company is manufacturing and/ or wholesaling products named "Puck Wrench" that bear the "THORSEN" trademark, which Ms. Hsu considers an infringement of her rights in the patented inventions mentioned above (see Enclosure III and IV for the photo of "Puck Wrench" and the relevant webpage excerpt). Moreover, based on our preliminary inspection, the structure of the "Puck Wrench" you manufacture and/ or wholesale is highly similar to the features disclosed in the patents in question.

The development of innovative products typically comes at a substantial price, which is often reflected in the intellectual property held by the patent owners. In recognition of this fact, our client respects the intellectual property rights of others. At the same time, our client expects her competitors to respect her intellectual property rights as well. Please review the US patents attached and kindly note that Ms. Hsu strives in every effort to protect her intellectual property at all costs.

With the patent rights entitled, we ask that you satisfy the following requests:

1. stop manufacturing and/ or selling the infringing "Puck Wrench";
2. recall the infringing "Puck Wrench" you already wholesaled to other customers and purchasers;
3. disclose all relevant information of the supplier/ manufacturer of the infringing products; and
4. render relevant sales information, e.g. the sales volume, unit price while

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imported, and unit price for sale.

Please respond to this letter **within 14 days upon receipt**. Should we receive no genuine responses in 14 days, we will of no doubt take legal actions against your company without further notice.

Sincerely yours,

Benjamin SU
Tommy and Jason Int'l IP Rights Co., Ltd.

Enclosure I: a copy of U.S. Patent No. 8,261,638
Enclosure II: a copy of U.S. Patent No. 8,307,742
Enclosure III: a photo of "Puck Wrench"
Enclosure IV: a webpage excerpt of the THORSEN 12PC PUCK WRENCH SET offered online

EXHIBIT C

鉅茂智慧產權有限公司
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Harbor Freight Tools
26541 Agoura Road,
Calabasas, CA 91302
USA
Email: info@HarborFreight.com

Our Ref.: GFL01595
U.S. Patent No. 8,261,638 & U.S. Patent No. 8,307,742 Owned by Ms. Chang Hsueh-O Hsu

VIA EMAIL ONLY
January 21, 2013

Dear Sirs,

We are representing Ms. Chang Hsueh-O Hsu of No.152, Nanbei 8th Rd., Da'an Dist., Taichung City 439, Taiwan (R.O.C.) in matters relating to intellectual property.

Ms. Hsu is the owner of US Patent No. 8,261,638 and US Patent No. 8,307,742 (see Enclosures I and II). With a copy of the patents attached showing the relevant details, we would like to draw your attention on the patents of HAND TOOL ADAPTER in force since 2010. With the two patents, Ms. Hsu holds the exclusive rights in manufacturing and selling the specific innovative hand tool adapters.

Due to the immense damage caused by patent-infringing products, Ms. Hsu instructed us to conduct a thorough search on the market, and to further commence appropriate legal actions against the infringers if no better settlements sought. Thereafter, it has come to our attention that your company is manufacturing and/ or wholesaling products named "Universal Grip Wrench" (Pittsburgh - Item#60435), which Ms. Hsu considers an infringement of her rights in the patented inventions mentioned above (see Enclosure III for the relevant webpage excerpts). Moreover, based on our preliminary inspection, the structure of the "Universal Grip Wrench" you manufacture and/ or wholesale is highly similar to the features disclosed in the patents in question.

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With the patent rights entitled, we ask that you satisfy the following requests:

1. stop manufacturing and/ or selling the infringing "Universal Grip Wrench";
2. recall the infringing "Universal Grip Wrench" you already wholesaled to other customers and purchasers;
3. disclose all relevant information of the supplier/ manufacturer of the infringing products; and
4. render relevant sales information, e.g. the sales volume, unit price while imported, and unit price for sale.

Please respond to this letter **within 14 days upon receipt**. Should we receive no genuine responses in 14 days, we will of no doubt take legal actions against your company without further notice.

Sincerely yours,

Benjamin SU
Tommy and Jason Int'l IP Rights Co., Ltd.

Enclosure I: a copy of U.S. Patent No. 8,261,638
Enclosure II: a copy of U.S. Patent No. 8,307,742
Enclosure III: webpage excerpts of the Universal Grip Wrench offered online

EXHIBIT D


THORSEN®
FORGING THE STANDARD OF QUALITY
Established 1926
PUCK™ WRENCH
- Spline Sockets In A Compact Form — 14 Sockets Sizes:
- Works On These Fasteners —
THORSEN®

EXHIBIT E

Universal Grip Wrench

Pittsburgh - Item#60435

Double click on above image to view full picture

Be The First To Write A Review

~~Only: $9.99~~
Sale: $4.99

1 Qty: ADD TO CART

This item may be available at your local Harbor Freight Tools Store

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ACCESSORIES YOU NEED

6" Digital Caliper

~~Only: $29.99~~
Sale: $19.99

LED Worklight/Flashlight, 27 Led Portable

~~Only: $5.99~~
Sale: $3.49

3-1/2" 9 LED Mini Flashlight

~~Only: $3.99~~
Sale: $1.99

Product Overview **Customer Reviews**

Description

Get 14 socket wrenches in the palm of your hand. This Universal Grip Wrench packs a lot of function into a small space, ideal for reaching hard-to-get fasteners.

- Splined sockets work with standard hex, Torx, square head fasteners as well as cup hooks and odd shapes
- Rugged stainless steel frame
- Cushioned rubber grip

Specifications

Name	Universal Grip Wrench
SKU	60435
Brand	Pittsburgh
Material	Stainless Steel, Rubber
Number of pieces included	1
Points	6, 12
SAE or Metric	Metric and SAE
Product Weight	0.39 lbs
Size(s)	SAE: 5/16 in., 3/8 in., 7/16 in., 1/2 in., 9/16 in., 5/8 in., 11/16 in. Metric: 8mm,10mm,11mm,13mm,14mm,16mm,17mm
Warranty	Lifetime

EXHIBIT F

US008307742B2

(12) **United States Patent**
Hsu

(10) **Patent No.: US 8,307,742 B2**
(45) **Date of Patent: Nov. 13, 2012**

(54) **HAND TOOL ADAPTER**

(76) Inventor: **Chang Hsueh-O Hsu**, Taichung (TW)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 240 days.

(21) Appl. No.: **12/948,464**

(22) Filed: **Nov. 17, 2010**

(65) **Prior Publication Data**

US 2011/0179914 A1 Jul. 28, 2011

Related U.S. Application Data

(63) Continuation-in-part of application No. 12/756,864, filed on Apr. 8, 2010, now Pat. No. 8,261,638.

(30) **Foreign Application Priority Data**

Jan. 26, 2010 (TW) ..... 99102210 A

(51) **Int. Cl.**
B25B 13/06 (2006.01)
B25B 23/16 (2006.01)
B25G 1/10 (2006.01)

(52) **U.S. Cl.** **81/124.4**; 81/124.3; 81/177.2

(58) **Field of Classification Search** 81/124.3, 124.7, 81/125.1, 177.2, 177.4, 177.5, 3.4, 3.41; 279/143; D8/29
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

226,582	A *	4/1880	Miller	81/124.4
D53,597	S *	7/1919	Marcmann	D8/28
1,930,238	A *	10/1933	Heller	81/124.4
D103,579	S *	3/1937	McNaught	D8/28
4,056,020	A *	11/1977	Coviello	81/177.2
4,727,782	A *	3/1988	Yang	81/124.4
6,029,547	A *	2/2000	Eggert et al.	81/124.6
6,257,107	B1 *	7/2001	Chang et al.	81/467
6,286,395	B1 *	9/2001	Frazier	81/60
6,314,841	B1 *	11/2001	Burk et al.	81/125.1
6,382,054	B1	5/2002	Kirk	
6,408,723	B1 *	6/2002	Zurbuchen	81/119
6,962,098	B2 *	11/2005	Eggert et al.	81/124.6
7,305,907	B2 *	12/2007	Burwell	81/60
2002/0011136	A1 *	1/2002	Eggert et al.	81/125.1
2004/0099102	A1 *	5/2004	Vaughan	81/124.4
2004/0177733	A1 *	9/2004	Peters	81/490
2005/0261784	A1 *	11/2005	Erb	623/65
2010/0011915	A1 *	1/2010	Badger	81/60

FOREIGN PATENT DOCUMENTS

TW	437519	5/2001
TW	M257924	3/2005
TW	M361408	7/2009

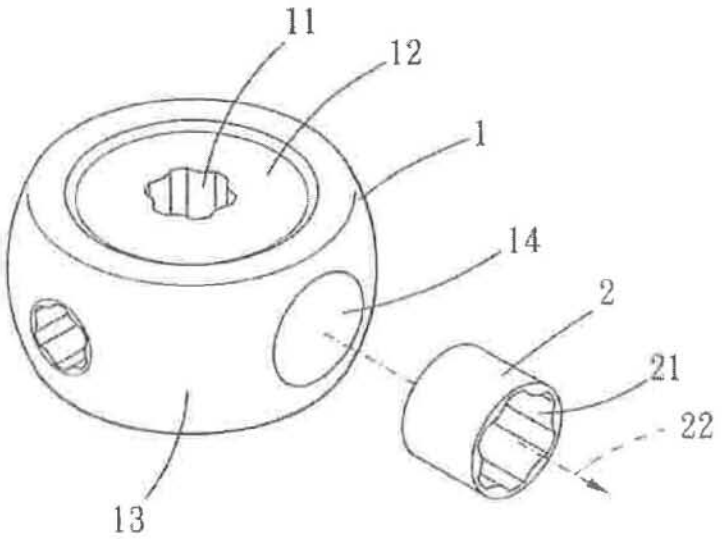
* cited by examiner

Primary Examiner David B Thomas
(74) *Attorney, Agent, or Firm* Muncy, Geissler, Olds & Lowe, PLLC

(57) **ABSTRACT**

A hand tool adapter of the present invention includes a wheel shaped main body and at least four sockets. The main body has a top surface, a bottom surface and a peripheral surface. The sockets are firmly disposed in the main body, locating annularly on the peripheral surface. Each socket has a non-circular bore. The main body is formed with no hole which has a dimension larger than the dimension of the largest bore. As such, the structure of the adapter is strengthened.

14 Claims, 3 Drawing Sheets



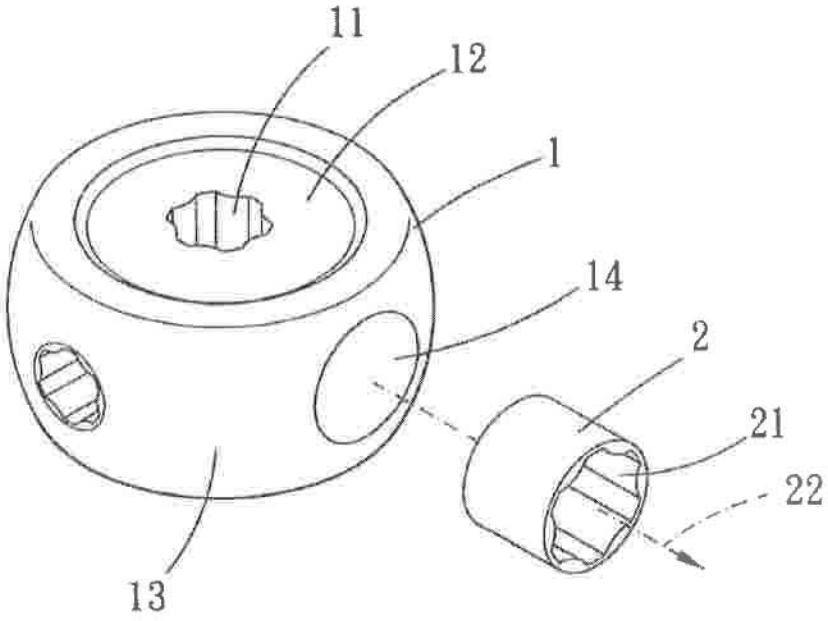


FIG. 1

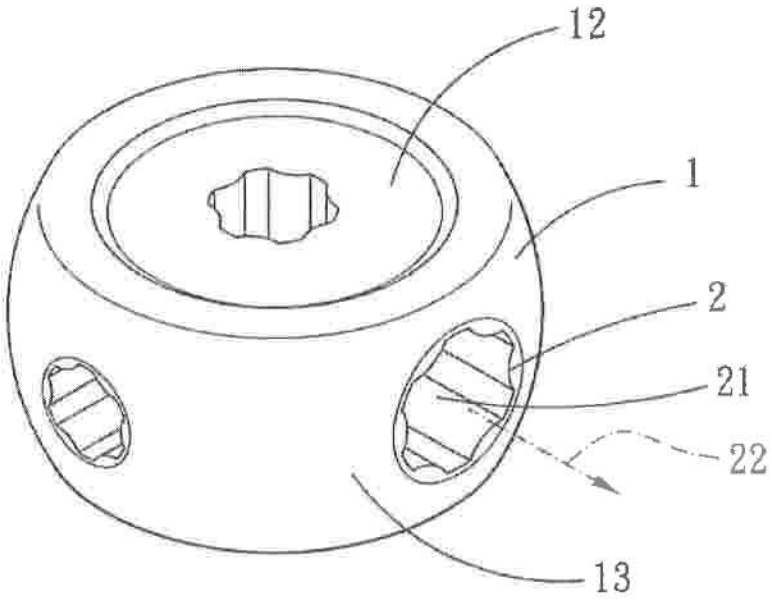


FIG. 2

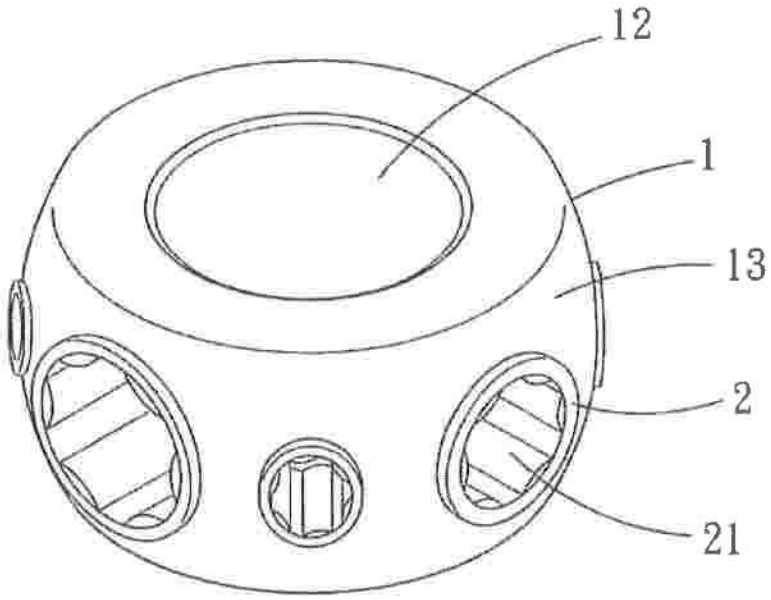


FIG. 3

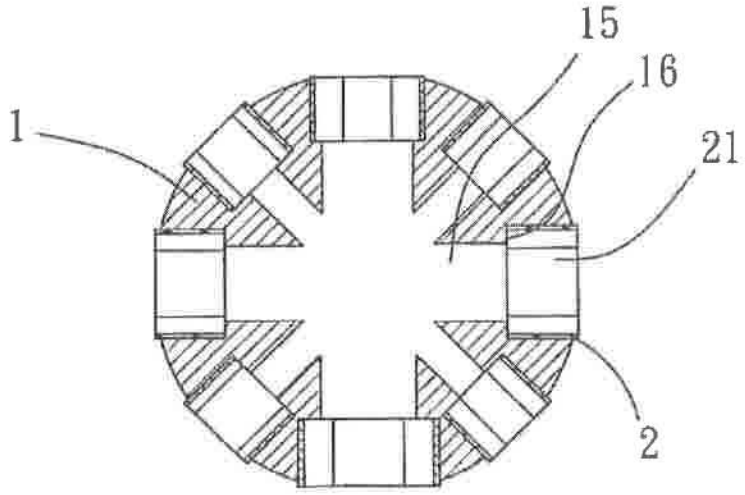


FIG. 4

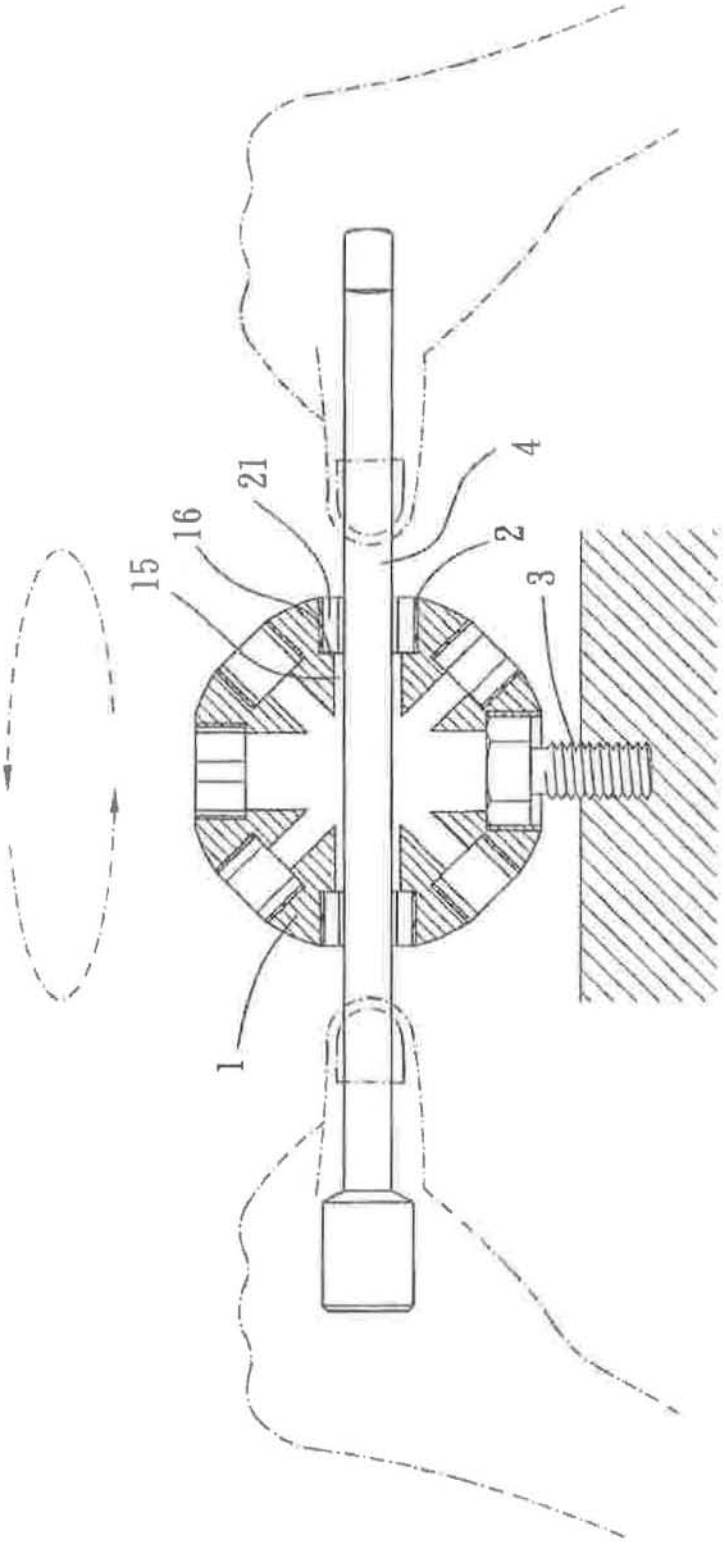


FIG. 5

HAND TOOL ADAPTER

The application is a Continuation-In-Part of prior application Ser. No. 12/756,864 filed Apr. 8, 2010, now U.S. Pat. No. 8,261,638, the entire contents of which are hereby incorporated by reference.

BACKGROUND OF THE INVENTION

1. Field of the Invention

2. Description of the Prior Art

As disclosed in TW M257924 and TW 437519, a conventional hand tool can drive a screw or a nut to rotate for fastening purposes. Another hand tool as disclosed in TW M361408 provides a ratchet mechanism whose axis can be adjusted. However, the driving portion thereof has fixed dimension. Thus it requires several hand tools in order to drive workpieces with different dimensions. Accordingly, adapters are arisen to mitigate such disadvantages. Nevertheless, it still requires several adapters in order to correspond to workpieces with different dimensions.

To fit with workpieces with different dimensions, U.S. Pat. No. 6,382,054 discloses a wrench. However, the wrench meets some problems in durability and practicability. As the openings are formed larger in size, the thickness of the wrench between two adjacent openings is going smaller. As a result, the mechanical strength of the wrench is weakened. Besides, the openings penetrate from flat surfaces to the cylindrical opening. When the wrench is put on a nut, the nut will probably fall into the cylindrical opening.

SUMMARY OF THE INVENTION

The main object of the present invention is to provide a durable and practical adapter which can correspond to workpieces with different dimensions.

To achieve the above and other objects, a hand tool adapter of the present invention includes a wheel shaped main body and at least four sockets.

The main body has a top surface, a bottom surface and a peripheral surface.

Each socket is firmly disposed in the main body. The sockets are annularly located on the peripheral surface. Each socket defines a non-circular bore. Each non-circular bore has an axial vector. The axial vectors of the non-circular bores are different from one another. Each non-circular bore has a dimension different from those of the other non-circular bores.

In some cases, a through hole is defined by the main body. The through hole penetrates from the top surface to the bottom surface. A dimension of the through hole is not larger than that of the non-circular bore whose dimension is larger than those of the other non-circle bores.

In some cases, the top surface and the bottom surface are solid surfaces.

The present invention will become more obvious from the following description when taken in connection with the accompanying drawings, which show, for purpose of illustrations only, the preferred embodiment(s) in accordance with the present invention.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a breakdown drawing showing an adapter of the present invention;

FIG. **2** is a perspective drawing showing an adapter of the present invention;

FIG. **3** is a perspective drawing showing another adapter of the present invention;

FIG. **4** is a profile showing another adapter of the present invention;

FIG. **5** is a drawing showing a user using an adapter of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Please refer to FIG. **1** and FIG. **2**. A hand tool adapter of the present invention includes a main body **1** and four or more than four sockets **2**.

The main body **1** is partially or totally made from plastic or from other nonmetallic material so as to reduce the weight of the hand tool adapter. Preferably, the main body **1** is made from glass-fiber-reinforced plastic. The main body **1** is wheel-shaped, so the main body has a top surface **12**, a bottom surface and a peripheral surface **13** between the top surface **12** and the bottom surface. A through hole **11** is defined by the main body. The through hole **11** penetrates from the top surface **12** to the bottom surface. Preferably, the through hole **11** has a non-circular cross section. Further, the main body **1** may be formed with four or more than four holes **14**. The holes are annularly located on the peripheral surface **12**. The cross sections of the holes **14** may be rounded or non-circular, e.g. hexagonal. The peripheral surface **12** has a circular contour. In other possible embodiments of the present invention, the periphery surface **12** may have a polygonal contour.

The sockets **2** may be made from metallic material to obtain better mechanical strength. Each socket **2** has a contour corresponding to the cross section of its corresponding hole **14** so that the socket **2** can be fixedly received therein. Each socket **2** defines a non-circular bore **21**, which has an axial vector **22** going from the inside of the main body **1** toward the outside of the main body **1**. The axial vectors **22** of the bores **21** are different from one another. Furthermore, each bore **21** has a dimension different from those of the other bores **21**. A dimension of the through hole **11** is not larger than that of the bore **21** whose dimension is larger than those of the other non-circle bores. In other words, at least one of the bores **21** has a dimension equal to or larger than the dimension of the through hole **11**. In the present embodiment, every two opposite bores **21** are coaxial.

Accordingly, the adapter can be directly used to drive a screw or the like. More specifically, the screw is engaged with one of the sockets. Users can grab and turn the adapter in one hand so as to tighten or loosen the screw. In addition, a rod can be used to insert through the through hole **11**. Users can drive the adapter to rotate with the rod.

According to the embodiments above, the dimension of the through hole **11** is not larger than the dimension of at least one of the bores **21**. The top surface and the bottom surface are capable to support whole structure of the adapter. As such, mechanical strength of the adapter is strengthened.

In other possible embodiments of the present invention, the sockets and the through hole may be formed on one metal slug to obtain greater mechanical strength. Furthermore, the metal slug is partially covered by nonmetallic material so as to produce the adapter. In other words, the main body may be made from the metal slug and nonmetallic material. In manufacturing, nonmetallic material can be fixed on the metal slug by injection molding, by bonding, by fusing or by fabricating.

Please refer to FIG. **3** to FIG. **5**. In another embodiment of the present invention, the adapter has eight sockets **2**. The top surface **12** and the bottom surface are solid surfaces. Solid surface is a substantial surface which is formed with no hole.

As such, mechanical strength of the adapter is further strengthened. The main body **1** may have one or more connecting hole(s) **15** communicating with two opposite coaxial bores **21**. Further, the connecting hole **15** may have a non-circular cross section. Preferably, a dimension of the connecting hole **15** is smaller than those of the bores **21** of the sockets, so that two step portions **16** are formed between the connecting hole **15** and the two bores **21**. As such, the workpiece **3** received in the bore **21** will not fall into the adapter, more specifically into the connecting hole **15**. Though the main body may have no through hole on the top surface and the bottom surface, a rod **4** can be used to insert through the connecting hole **15** and to drive the main body **1** to rotate. It is noted that the adapter of the present invention has several sockets **2** for users to choose from, so as to correspond to workpieces with different dimensions. Further, the user can use the adapter to drive the workpiece bare-handedly or with the help of a rod, as disclosed hereinabove.

What is claimed is:

1. A hand tool adapter, comprising:

a wheel shaped main body, having a top surface, a bottom surface and a peripheral surface, a through hole being defined by the main body, the through hole penetrating from the top surface to the bottom surface;

at least four sockets, each of which is firmly disposed in the main body, the sockets being annularly located on the peripheral surface, each socket defining a non-circular bore, each non-circular bore having an axial vector, the axial vectors of the non-circular bores being different from one another, each non-circular bore having a dimension different from those of the other non-circular bores;

wherein a dimension of the through hole is not larger than that of the non-circular bore whose dimension is larger than those of the other non-circle bores.

2. The adapter of claim **1**, wherein the sockets are formed on a metal slug, the through hole is formed on the metal slug, the metal slug is partially covered by nonmetallic material so as to produce the adapter.

3. The adapter of claim **1**, wherein the main body is partially made from glass-fiber-reinforced plastic, the sockets are made form metallic material.

4. The adapter of claim **1**, wherein every two opposite non-circular bores are coaxial.

5. The adapter of claim **4**, wherein the main body has at least one connecting hole communicating with two opposite non-circular bores.

6. The adapter of claim **5**, wherein a dimension of the connecting hole is smaller than those of the opposite non-circular bores.

7. The adapter of claim **1**, wherein the peripheral surface has a circular contour.

8. A hand tool adapter, comprising:

a wheel shaped main body, having a solid top surface, a solid bottom surface and a peripheral surface;

at least four sockets, each of which is firmly disposed in the main body, the sockets being annularly located on the peripheral surface, each socket defining a non-circular bore, each non-circular bore having an axial vector, the axial vectors of the non-circular bores being different from one another, each non-circular bore having a dimension different from those of the other non-circular bores.

9. The adapter of claim **8**, wherein the sockets are formed on a metal slug, the metal slug is partially covered by non-metallic material so as to produce the adapter.

10. The adapter of claim **8**, wherein the main body is partially made from glass-fiber-reinforced plastic, the sockets are made form metal

11. The adapter of claim **8**, wherein every two opposite non-circular bores are coaxial.

12. The adapter of claim **11**, wherein the main body has at least one connecting hole communicating with two opposite non-circular bores.

13. The adapter of claim **12**, wherein a dimension of the connecting hole is smaller than those of the opposite non-circular bores.

14. The adapter of claim **8**, wherein the peripheral surface has a circular contour.

* * * * *