



US009409286B2

(12) **United States Patent**  
**Hsu**

(10) **Patent No.:** **US 9,409,286 B2**  
(45) **Date of Patent:** **Aug. 9, 2016**

- (54) **SCREW REMOVAL TOOL**
- (71) Applicant: **Yang-Ming Hsu**, Changhua (TW)
- (72) Inventor: **Yang-Ming Hsu**, Changhua (TW)
- (\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 316 days.
- (21) Appl. No.: **14/293,962**
- (22) Filed: **Jun. 2, 2014**
- (65) **Prior Publication Data**  
US 2015/0343623 A1 Dec. 3, 2015
- (51) **Int. Cl.**  
**B25B 27/18** (2006.01)  
**B25B 15/00** (2006.01)
- (52) **U.S. Cl.**  
CPC ..... **B25B 27/18** (2013.01); **B25B 15/008** (2013.01)
- (58) **Field of Classification Search**  
CPC .... B25B 27/18; B25B 23/108; B25B 15/008;  
B25B 23/0035; B25B 15/02; B25B 23/105;  
B25B 13/06; B25B 13/44; B25B 13/54  
See application file for complete search history.

- (56) **References Cited**  
U.S. PATENT DOCUMENTS
- 5,927,165 A \* 7/1999 Vasudeva ..... B25B 15/008  
81/442
- 6,675,679 B2 \* 1/2004 Dugan ..... B25B 13/5083  
81/442
- 7,024,972 B2 \* 4/2006 Werner ..... B25B 13/48  
81/442
- 7,066,062 B2 \* 6/2006 Flesher ..... B25B 13/485  
411/403
- 2008/0190252 A1 \* 8/2008 Parrott ..... A61B 17/861  
81/451

\* cited by examiner  
*Primary Examiner* — Robert Scruggs  
(74) *Attorney, Agent, or Firm* — Che-Yang Chen; Law Offices of Michael Chen

(57) **ABSTRACT**  
A screw removal tool may include a tool body, a driving unit and a tool tip, wherein the tool body has a hexagonal shaft, which is connected to a cylindrical pin at a driving end, and the cylindrical pin is connected to a block, and the pin and the block are arranged in an eccentric manner at the driving end; and wherein the driving unit has an eccentric connecting hole that mates with the cylindrical pin of the tool body and the driving unit can be rotated; wherein the tool tip has an eccentric hole that mates with the block, and pressure is applied on the block to prevent the tool tip from falling out.

**5 Claims, 9 Drawing Sheets**

