

(12) **EUROPEAN PATENT APPLICATION**

(21) Application number: 82305341.8

(51) Int. Cl.<sup>3</sup>: B 25 B 23/145

(22) Date of filing: 07.10.82

(30) Priority: 13.10.81 US 310008

(43) Date of publication of application:  
20.04.83 Bulletin 83/16

(88) Date of deferred publication of search report: 11.07.84

(84) Designated Contracting States:  
BE DE FR GB IT LU NL SE

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(54) **Pneumatically driven apparatus.**

(57) A pneumatically driven tool includes a hollow housing (18) in which is located an air motor including a rotatable motor shaft (20) arranged to drive a tool such as a screwdriver, socket wrench via a tool drive shaft (22). A torque-sensitive clutch (24) is located between the tool drive shaft (22) and the motor shaft (20) permitting the motor shaft (20) to move relative to the tool drive shaft (22) when a predetermined torque is encountered. A valve (14) located in the housing (18) between the motor and the air supply source controls the flow of pressurised air to the motor. The valve (14) is controlled by an elongated valve operating member (54) having a first end (56) engaging the valve and

having a second end (58). A latch member (62) is pivotally mounted on the tool drive shaft (22) and has a surface (60) thereon that engages the second end (58) of the valve operating member (54). A hole (76) formed in the latch member (62) is sized to receive the end of the elongated valve operating member (54). Normally the hole (76) is not in alignment with the valve operating member (54) and, thus, the valve (14) is held in the open position. Upon relative rotation as previously mentioned, the latch member (62) is cammed to a position so that the hole (76) aligns with the valve operating member (54) permitting the valve (14) to close.

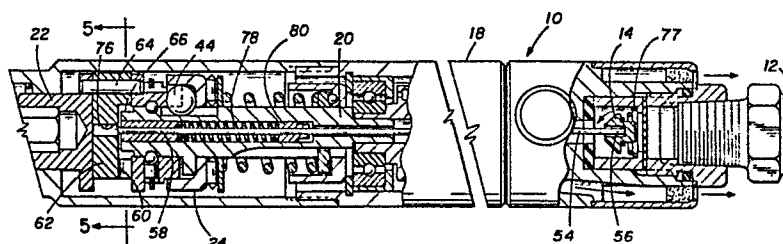
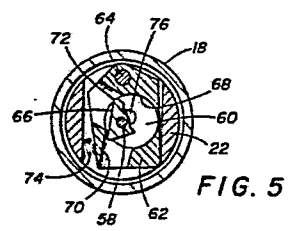


FIG. 4B





| DOCUMENTS CONSIDERED TO BE RELEVANT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                               |                                                |                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|------------------------------------------------|------------------------------------------------------------|
| Category                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim                              | CLASSIFICATION OF THE APPLICATION (Int. Cl. <sup>3</sup> ) |
| A,D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | US-A-4 154 308 (GOLDSBERRY)<br>*Abstract*                                     | 1,5                                            | B 25 B 23/145                                              |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | DE-A-2 409 815 (BOSCH)<br>*Claims 6,7; figure 4*                              | 1,4                                            |                                                            |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | US-A-3 477 521 (KIESTER)<br>*Figure 6; column 4, lines 11-19*                 | 1-3                                            |                                                            |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | GB-A-2 040 768 (DRESSER)                                                      |                                                |                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                               |                                                | TECHNICAL FIELDS SEARCHED (Int. Cl. <sup>3</sup> )         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                               |                                                | B 25 B                                                     |
| The present search report has been drawn up for all claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                               |                                                |                                                            |
| Place of search<br>THE HAGUE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                               | Date of completion of the search<br>16-03-1984 | Examiner<br>KUHN E.F.E.                                    |
| <p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X : particularly relevant if taken alone<br/> Y : particularly relevant if combined with another document of the same category<br/> A : technological background<br/> O : non-written disclosure<br/> P : intermediate document</p> <p>T : theory or principle underlying the invention<br/> E : earlier patent document, but published on, or after the filing date<br/> D : document cited in the application<br/> L : document cited for other reasons<br/> &amp; : member of the same patent family, corresponding document</p> |                                                                               |                                                |                                                            |