

Title (en)

Wrenches for removing threaded filters or the like.

Title (de)

Schlüssel zum Lösen von schraubbaren Filtern oder dergleichen.

Title (fr)

Perfectionnements aux clés de desserrage pour filtres vissables ou analogues.

Publication

**EP 0343039 A1 19891123 (FR)**

Application

**EP 89401300 A 19890510**

Priority

FR 8806538 A 19880516

Abstract (en)

This concerns a wrench for removing a ribbed filter cap, comprising a rigid ring (6) capable of surrounding the ribbed portion of the cap and having a non-circular internal contour (7) capable of cooperating with the ribbing for the purpose of angular engagement, a rigid handle (8) being mounted pivotably on the ring (6) about an axis (Y) parallel to that (X) of the ring, in such a way that the angular displacements of this handle are limited by buttressing from its radial position for the direction corresponding to the removal of the cap (arrow F), and, in contrast, remain free in the opposite direction, and obstructing means (14) provided on the ring so that the wrench is able to engage around the cap to be removed only when facing the right way. The pivoting axis (Y) of the handle is arranged in the immediate vicinity of the ring. <IMAGE>

IPC 1-7

**B25B 13/48**; **B25B 27/00**

IPC 8 full level

**B25B 13/48** (2006.01); **B25B 23/16** (2006.01); **B25B 27/00** (2006.01); **B25G 1/04** (2006.01)

CPC (source: EP)

**B25B 13/48** (2013.01); **B25B 23/16** (2013.01); **B25B 27/0042** (2013.01); **B25G 1/043** (2013.01)

Citation (search report)

- [Y] GB 1496524 A 19771230 - BRITISH LEYLAND UK LTD
- [Y] US 3853026 A 19741210 - RHODES C
- [A] DE 2853261 A1 19800619 - DAIMLER BENZ AG
- [A] US 4733583 A 19880329 - LEWIS ROBERT W [US]
- [A] US 3119290 A 19640128 - IVIE ROGER G
- [A] US 3066559 A 19621204 - HARVEL LOYD F, et al
- [A] US 4643053 A 19870217 - RHODES CHARLES W [US]
- [A] US 3885477 A 19750527 - SHOOK ALVIN L
- [A] GB 1458089 A 19761208 - YAMAMOTO BYORA CO LTD
- [A] US 3465622 A 19690909 - WINANS LINNAEUS
- [A] US 2625066 A 19530113 - PETTY WILLIAM M
- [A] MACHINE DESIGN, vol. 50, no. 17, juillet 1978, page 42, Cleveland, US; "Jointed tire iron overpowers frozen wheel nuts"

Cited by

FR2705048A1; CN102560924A; US6423222B1; FR2723872A1; FR2731262A1

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