

Title (en)
HANDWHEEL FOR A GAS CYLINDER VALVE

Publication
EP 0399316 B1 19930505 (DE)

Application
EP 90108960 A 19900512

Priority
DE 3916851 A 19890524

Abstract (en)
[origin: EP0399316A1] The hand wheel (3) has a central depression (8) on the upper side for holding a nut (2) which fixes the hand wheel (3) onto the valve spindle (1). The stub (20) of a two-layer plastic cap (9) engages over the nut (2), which plastic cap (9) is clamped firmly in recesses (11) of the hand wheel (3). An induction coil (13) together with a chip (14), connected thereto, are embedded, encapsulated in a waterproof manner, in the space (17) between the two cap layers (15, 18) on the circumferential side of a central pin (16). Data for the administration of gas cylinders can be stored in the chip (14) and can also be called up from there again. A read/write unit, especially a portable unit, can be used for this purpose.
<IMAGE>

IPC 1-7
F16K 31/60; **F16K 37/00**; **F17C 13/02**; **G06K 7/08**

IPC 8 full level
F16K 31/60 (2006.01); **F16K 37/00** (2006.01); **F17C 13/00** (2006.01); **F17C 13/02** (2006.01); **G06K 7/08** (2006.01)

CPC (source: EP)
F17C 13/003 (2013.01); **F17C 2205/0329** (2013.01); **F17C 2205/057** (2013.01)

Cited by
FR2876200A1; FR2719142A1; US8120484B2; US7850893B2; WO2008157133A1; WO2006037876A1; WO9515622A1

Designated contracting state (EPC)
BE DE DK FR GB IT LU NL SE

DOCDB simple family (publication)
DE 3916851 C1 19900125; DE 59001343 D1 19930609; DK 0399316 T3 19930809; EP 0399316 A1 19901128; EP 0399316 B1 19930505; FI 901837 A0 19900411; FI 91666 B 19940415; FI 91666 C 19940725

DOCDB simple family (application)
DE 3916851 A 19890524; DE 59001343 T 19900512; DK 90108960 T 19900512; EP 90108960 A 19900512; FI 901837 A 19900411