## (11) **EP 2 113 651 A8**

## (12) CORRECTED EUROPEAN PATENT APPLICATION

(15) Correction information:

Corrected version no 1 (W1 A1)

Corrections, see

Bibliography INID code(s) 84

(48) Corrigendum issued on:

09.06.2010 Bulletin 2010/23

(43) Date of publication:

04.11.2009 Bulletin 2009/45

(21) Application number: 09158337.7

(22) Date of filing: 21.04.2009

(84) Designated Contracting States:

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL

PT RO SE SI SK TR
Designated Extension States:

**AL BA RS** 

(30) Priority: 23.04.2008 EP 08425280

(71) Applicant: Magneti Marelli S.p.A.

Corbetta (MI) (IT)

(51) Int Cl.:

F02M 51/06 (2006.01) F02M 61/16 (2006.01) F02M 61/20 (2006.01)

(72) Inventors:

 Dragone, Pasquale 75100 Matera (IT)

 Cobianchi, Andrea 40133 Bologna (IT)

 Vignoli, Mirco 40069 Zola Predosa (IT)

(74) Representative: Jorio, Paolo et al

Studio Torta S.r.l.

Via Viotti 9

10121 Torino (IT)

## (54) Electromagnetic fuel injector for gaseous fuels with anti-wear stop device

(57)Electromagnetic fuel injector (1) for gaseous fuels comprising: an injection nozzle (3) controlled by an injection valve (8); a movable shutter (10) to regulate the flow of fuel through the injection valve (8); an electromagnetic actuator (7), which is suitable to move the shutter (10) between a closed position and an open position of the injection valve (8) and comprises a fixed magnetic pole (16), a coil (14) suitable to induce a magnetic flux in the magnetic pole (16), and a movable anchor (17) suitable to be magnetically attracted by the magnetic pole (16); an absorption element (28), which is made of an amagnetic elastic material and is arranged between the magnetic pole (16) and the anchor (17); and a protective element (29), which is made of a magnetic metal material having high surface hardness and is interposed between the absorption element (28) and the anchor (17).

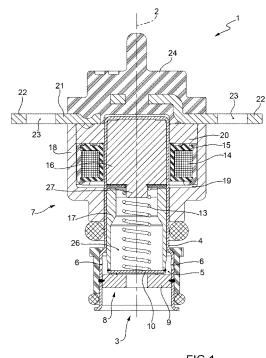


FIG.1

P 2 113 651 A8