

Title (en)
Method for manufacturing a fluid injector

Title (de)
Verfahren zur Herstellung eines Flüssigkeitsinjektors

Title (fr)
Procédé de fabrication d'un injecteur de fluide

Publication
EP 1936182 B1 20090930 (EN)

Application
EP 06025879 A 20061213

Priority
EP 06025879 A 20061213

Abstract (en)
[origin: EP1936182A1] A fluid injector comprises a housing with a needle, preventing fluid dosing in a closing position, in which the needle is sealingly in contact with a seat, and enabling fluid dosing apart from the closing position. A solid state actuator unit is operably connected to the needle and acts on the needle. A return spring is preloaded to exert a force acting to bring the needle in the closing position. A given test force is exerted on the solid state actuator unit, being given in a way to ensure that the needle receives a given seat reaction force from the seat with the fluid injector being preassembled with the housing, the needle, the return spring and the solid state actuator unit. While asserting the given test force (F_T) a characteristic quantity of the solid state actuator unit is measured as a first quantity value (C₁). At least one element is assembled exerting a force on the solid state actuator unit and on the needle. The characteristic quantity of the solid state actuator unit is measured as a second quantity value (C₂). It is determined whether the seat reaction force (F_{SR}) is within an acceptable range after the assembly of the at least one element depending on the first and second quantity value (C₁, C₂).

IPC 8 full level
F02M 61/16 (2006.01)

CPC (source: EP)
F02M 51/0603 (2013.01); **F02M 61/168** (2013.01); **F02M 2200/8092** (2013.01)

Designated contracting state (EPC)
DE FR IT

DOCDB simple family (publication)
EP 1936182 A1 20080625; **EP 1936182 B1 20090930**; DE 602006009533 D1 20091112

DOCDB simple family (application)
EP 06025879 A 20061213; DE 602006009533 T 20061213