

Title (en)

Valve needle assembly and method for producing the same

Title (de)

Nadelventilanordnung und Verfahren zu ihrer Herstellung

Title (fr)

Ensemble de soupape a pointeau et procédé pour le réaliser

Publication

EP 1469187 A1 20041020 (EN)

Application

EP 03008954 A 20030416

Priority

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Abstract (en)

The invention refers to a valve needle assembly comprising a valve needle (14) and an electro-magnetic armature (16) coupled to the valve needle (14), the valve needle assembly being suited for use in a valve assembly (10) of an injector unit for injecting fuel into an engine of a vehicle, said valve assembly comprising a valve body (18) with a valve body cavity (20), in which the valve needle assembly is to be inserted, said valve body (18) comprising at least one ring type guiding zone (28) for guiding an axial movement of the valve needle assembly, and the valve needle assembly comprising a corresponding cylindrical guiding zone (30). <??>In accordance with the invention it is provided that sizing means (28,34,36) comprise at least one sizing member (36) neighbouring the cylindrical guiding zone (30) for sizing the diameter of the ring type guiding zone (28) when inserting the valve needle assembly into the valve body cavity (20). <IMAGE>

IPC 1-7

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IPC 8 full level

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Citation (search report)

- [XY] DE 10051016 A1 20020418 - BOSCH GMBH ROBERT [DE]
- [Y] US 6062499 A 20000516 - NAKAMURA MASAHITO [JP], et al
- [X] US 4519547 A 19850528 - KUBACH HANS [DE], et al
- [XA] EP 1066466 A1 20010110 - MTU FRIEDRICHSHAFEN GMBH [DE], et al
- [A] US 6283389 B1 20010904 - HOFMANN KARL [DE]

Cited by

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