

Title (en)  
FUEL INJECTION VALUE AND METHOD FOR PRODUCING THE SAME

Title (de)  
KRAFTSTOFFEINSPRITZVENTIL UND EIN VERFAHREN ZUR HERSTELLUNG DESSELBEN

Title (fr)  
SOUPAPE D'INJECTION DE CARBURANT ET SON PROCEDE DE FABRICATION

Publication  
**EP 1644635 A1 20060412 (DE)**

Application  
**EP 04730819 A 20040503**

Priority  
• DE 2004000931 W 20040503  
• DE 10329731 A 20030702

Abstract (en)  
[origin: WO2005010349A1] The invention relates to a fuel injection valve comprising an injection duct (11) via which fuel can be injected into the combustion chamber. The injection duct (11) has an inlet opening (30) and an outlet opening (38), and a cylindrical section (32) is formed at its end located on the side of inflow with regard to the direction of flow of the fuel. A conical section (34) is connected to the cylindrical section (32), narrows in the direction of flow and extends up to the outlet opening (38) of the injection duct (11). According to a method for producing injection ducts (11) of this type, a laser beam (54) is directed from the outside through the injection duct (11) and onto a mirror (50) whereby enabling the formation of the widening of the cylindrical section.

IPC 1-7  
**F02M 61/18**; **F02M 61/16**

IPC 8 full level  
**B23K 26/38** (2006.01); **F02M 61/16** (2006.01); **F02M 61/18** (2006.01)

CPC (source: EP)  
**B23K 26/384** (2015.10); **B23K 26/389** (2015.10); **F02M 61/168** (2013.01); **F02M 61/1833** (2013.01); **F02M 61/1846** (2013.01)

Citation (search report)  
See references of WO 2005010349A1

Designated contracting state (EPC)  
DE FR

DOCDB simple family (publication)  
**DE 10329731 A1 20050203**; EP 1644635 A1 20060412; WO 2005010349 A1 20050203

DOCDB simple family (application)  
**DE 10329731 A 20030702**; DE 2004000931 W 20040503; EP 04730819 A 20040503