

Title (en)
A FUEL VALVE FOR INJECTING FUEL INTO THE CYLINDERS OF A LARGE TURBOCHARGED TWO-STROKE UNIFLOW SCAVENGED INTERNAL COMBUSTION ENGINE AND AN ENGINE WITH SUCH FUEL VALVE

Title (de)
BRENNSTOFFVENTIL ZUM EINSPRITZEN VON BRENNSTOFF IN DIE ZYLINDER EINES GROSSEN TURBOGELADENEN ZWEITAKT-EINTAKT-VERBRENNUNGSMOTOR UND MOTOR MIT SOLCH EINEM BRENNSTOFFVENTIL

Title (fr)
SOUPAPE DE CARBURANT POUR INJECTER DU CARBURANT DANS LES CYLINDRES D'UN GRAND MOTEUR À COMBUSTION INTERNE À DEUX TEMPS À BALAYAGE CONTINU ET À TURBOCOMPRESSEUR ET MOTEUR AVEC UNE TELLE SOUPAPE

Publication
EP 4435250 A1 20240925 (EN)

Application
EP 24165255 A 20240321

Priority
DK PA202370148 A 20230324

Abstract (en)
A fuel valve (30) configured for injecting fuel into a large two-stroke turbocharged uniflow scavenged internal combustion engine. It comprises a fuel valve housing (32) with an axis (X), a proximal and distal end (31,35), an axially displaceable valve needle (35), and a nozzle (40) disposed at the distal end of the fuel valve housing (32). The nozzle body extends along the axis, with a cylindrical portion between the base (42) and closed distal end (44). An inlet (48) of the nozzle body receives liquid fuel from the fuel valve housing (32), and a plurality of straight nozzle bores (45) open to the outer surface of the nozzle body at different radial angles. A single straight main bore (50) extends longitudinally from the inlet (48) into the nozzle body, connected to the straight nozzle bores (45) by individual supply passages (49). The valve needle (35) has a distal section with a cylindrical end section (39) carried by a shank (38) and is journaled with a tight fit in the straight main bore (50) to disconnect individual supply passages (49) from the main straight bore (50) when the valve needle (35) is in the closed position.

IPC 8 full level
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CPC (source: EP)
F02M 61/042 (2013.01); **F02M 61/06** (2013.01); **F02M 61/161** (2013.01); **F02M 61/1806** (2013.01)

Citation (applicant)
US 5765755 A 19980616 - PETERS LESTER L [US], et al

Citation (search report)
• [A] EP 3070321 A1 20160921 - MAN DIESEL & TURBO DEUTSCHLAND [DK]
• [A] EP 3009641 A1 20160420 - MAN DIESEL & TURBO DEUTSCHLAND [DK]
• [AD] US 5645225 A 19970708 - HASEGAWA TOSHIYUKI [JP], et al

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