

Title (en)
Multi-point injector for turbomachine

Title (de)
Mehrpunkt-Einspritzer für Turbotriebwerk

Title (fr)
Injecteur multipoint pour turbomachine

Publication
EP 2026002 A1 20090218 (FR)

Application
EP 08161242 A 20080728

Priority
FR 0757025 A 20070810

Abstract (en)
The injector has two shells (34, 35) with bodies encased relative to each other such that internal openings and external diameters of the bodies mutually and partially overlap by defining a hollow volume. The volume comprises three concentric baffles (360-362) that are continuous and communicated with distinct controlled circulation channels. The baffles (361, 362) are opened into a fuel intake chamber (37) placed in a zone for supply of fuel and homogenous cooling of the injector, where the zone is diametrically opposite to the channels and communicated with a metering jet. An independent claim is also included for a method for manufacturing a multipoint type fuel injector.

Abstract (fr)
Injecteur multipoint (3) pour turbomachine selon lequel tout risque de cokéfaction du carburant est éliminé. Selon l'invention, on réalise un refroidissement homogène du carburant multipoint susceptible de stagner à l'intérieur de son circuit, grâce à la réalisation de chicanes (360, 361, 362) continues qui communiquent chacune avec au moins un canal de circulation distinct (342p, 342m), et dont les chicanes périphériques (361, 362) débouchent dans une chambre d'admission (37) du carburant disposée dans une zone diamétralement opposée aux canaux de circulation (342p, 342m) et qui communique avec le gicleur (32) de carburant pilote, afin d'obtenir une alimentation et un refroidissement homogènes de l'injecteur.

IPC 8 full level
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CPC (source: EP US)
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Citation (search report)
• [Y] EP 1806536 A1 20070711 - SNECMA [FR]
• [Y] US 6523350 B1 20030225 - MANCINI ALFRED A [US], et al

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