Title (en)

Liquid injection apparatus

Title (de)

Einspritzvorrichtung für Flüssigkeit

Title (fr)

Dispositif d'injection de liquide

Publication

EP 1300586 A3 20031203 (EN)

Application

EP 02256849 A 20021002

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- JP 2001352166 A 20011116
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- JP 2002209223 A 20020718

Abstract (en)

[origin: EP1300586A2] A liquid injection apparatus is provided which is capable of uniformly atomizing and injecting liquid such as fuel even if the surrounding environment changes significantly. <??>A liquid injection apparatus (10) comprises an injection unit (14) fixed to a liquid injection space (21) defined by, e.g., a suction pipe (20) of an internal combustion engine, and a pressurizing pump (11) for pressurizing liquid from a liquid storage tank (22) up to a pressure to supply the liquid to the injection unit and to inject the liquid into the space. The injection unit comprises, in order to atomize the liquid supplied by the pressurizing pump, a plurality of chambers in which a piezoelectric/electrostrictive element is formed at least on its wall surface, and a plurality of liquid ejection nozzles. Vibration energy induced by the piezoelectric/electrostrictive element is given to the pressurized liquid in the chamber of the injection unit. and the liquid is atomized and injected into the liquid injection space from the extremity of the liquid ejection nozzle.

IPC 1-7

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IPC 8 full level

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CPC (source: EP)

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