

Title (en)

Method for making micromechanical nozzles or liquid jets

Title (de)

Verfahren zur Herstellung micromechanischer Düsen oder Flüssigkeitsstrahlen

Title (fr)

Procédé de fabrication micromécanique de buses ou jets de liquide

Publication

EP 0714774 B1 19980708 (FR)

Application

EP 95402686 A 19951129

Priority

FR 9414461 A 19941201

Abstract (en)

[origin: EP0714774A1] The method consists of forming at least one groove (110) in the surface (112) of a first substrate (114), assembling the first substrate with a second substrate (116) which covers the groove and forms a channel, and forming a protective coating on the inside of the channel by thermal oxidation of its walls. The first and second substrates are then cut perpendicular to the channel to form the nozzle (118) for the liquid jet, and the interior protective coating is removed. The two substrates can be machined to form an orifice (140) and/or a reservoir for feeding the nozzles. The first and second substrates are made from silicium, and the inner coating is of silicium oxide, which is removed in a hydrofluoric acid bath.

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IPC 8 full level

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