

Title (en)
INK CONDUIT PLUGS FOR AN INKJET PRINTHEAD AND METHODS OF LASER WELDING SAME

Title (de)
TINTENLEITUNGSSTOPFEN FÜR EINEN TINTENSTRAHLDRUCKKOPF UND VERFAHREN ZUM LASERSCHWEISSEN DAFÜR

Title (fr)
BOUCHONS POUR CONDUITS D'ENCRE POUR TETE D'IMPRESSION PAR JET D'ENCRE ET PROCEDE DE SOUDAGE LASER DE CEUX-CI

Publication
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Application
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Abstract (en)
[origin: WO2005102713A1] An inkjet printhead having a unitary body (14) with an ink conduit between an ink outlet port (22) of an ink compartment (12) and an ink feed slot (32) compatible with a heater chip has an ink conduit plug (50) laser welded thereto to prevent ink from leaking from the ink conduit as the ink flows from the ink outlet port (22) to the ink feed slot (32) during use. In one embodiment, the ink conduit plug (50) has a lid and an insertion portion (54). The lid (50) has a laser transparent periphery that becomes illuminated with a laser light to weld an undersurface thereof over an opening of the ink conduit. In another embodiment, the ink conduit plug (50) has two plug sections banded together with either a flexible material or angularly disposed links. The band plug sections may or may not be laser welded.

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Citation (search report)

- [YA] US 5831653 A 19981103 - BRANDON FRED YOUNG [US], et al
- [Y] US 2002191058 A1 20021219 - ANDERSON STEPHEN A [US], et al
- [Y] JP S5987165 A 19840519 - RICOH KK
- See references of WO 2005102713A1

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