

Title (en)  
Modular ink jet print head

Title (de)  
Tintendruckkopf aus einzelnen Tintendruckmodulen

Title (fr)  
Tête d'impression par jet d'encre modulaire

Publication  
**EP 0691205 A3 19960320 (DE)**

Application  
**EP 95250145 A 19950616**

Priority  
DE 4424771 A 19940705

Abstract (en)  
[origin: EP0691205A2] An ink jet print head is produced with four identical modules 1 that consists of a number of laminates 11-14. Each module has two arrays of ink jet chambers 16, 17 that are offset from each other. The end section of the head unit is enclosed by an adapter plate 2 having a series of apertures aligned with the channels. The adapter plate is covered by a plate 3 having a pattern of nozzles 31. Pressurised droplets of ink are generated from the nozzles by activation of piezo actuators in the head 15. <IMAGE>

IPC 1-7  
**B41J 2/15**

IPC 8 full level  
**B41J 2/14** (2006.01); **B41J 2/15** (2006.01)

CPC (source: EP US)  
**B41J 2/14233** (2013.01 - EP US); **B41J 2002/14379** (2013.01 - EP US); **B41J 2202/19** (2013.01 - EP US)

Citation (search report)

- [A] EP 0486256 A2 19920520 - CITIZEN WATCH CO LTD [JP]
- [A] EP 0431692 A1 19910612 - OCE NEDERLAND BV [NL]
- [A] US 4605939 A 19860812 - HUBBARD DAVID W [US], et al
- [A] EP 0183224 A1 19860604 - SIEMENS AG [DE]
- [A] US 4752789 A 19880621 - MALTSEV VIACHESLAV B [US]
- [A] DE 3208104 A1 19830908 - PHILIPS PATENTVERWALTUNG [DE]

Cited by  
WO9911461A1

Designated contracting state (EPC)  
CH DE FR GB IT LI

DOCDB simple family (publication)  
**DE 4424771 C1 19951123**; DE 59503508 D1 19981015; EP 0691205 A2 19960110; EP 0691205 A3 19960320; EP 0691205 B1 19980909; US 6367911 B1 20020409

DOCDB simple family (application)  
**DE 4424771 A 19940705**; DE 59503508 T 19950616; EP 95250145 A 19950616; US 49422795 A 19950623