

Title (en)  
Auxiliary nozzle for a weaving loom

Title (de)  
Hilfsdüse für eine Webmaschine

Title (fr)  
Tuyère auxiliaire pour un métier à tisser

Publication  
**EP 1428918 A3 20040901 (DE)**

Application  
**EP 04004657 A 20000414**

Priority  
• BE 9900257 A 19990414  
• EP 00926927 A 20000414

Abstract (en)  
[origin: EP1428918A2] The auxiliary jet (8), for the insertion of a weft through the shed of a jet loom, is a hollow needle (11) with a bulge (13) at the point (12). The bulge (13) is aligned towards the reed, when the auxiliary jet (8) is installed in the loom. The bulge (13) lies at the wall of the hollow needle (11) in a stepless configuration. The bulge (13) has a wall (27) which is aligned with the wall (26) with the outflow opening(s) (25). The interior of the hollow needle (11) is expanded at the bulge (13), and preferably narrows at right angles to it. At least the wall (26) with the outflow openings (25) has an increased thickness. The outflow opening(s) (25) is (are) structured as jets. The point (12) of the hollow needle (11) has a straight upper edge (28), extending to the bulge (13) zone, and is aligned at an angle of 70-110degrees to the longitudinal axis (32) of the hollow needle (11). The highest point (30) of the upper edge (28) is at the bulge (13). When the auxiliary jet (8) is installed in the loom, the upper edge (28) of the point (12) lies along the longitudinal line of the warps, or is at a tangent to a circle round the sley axis. When in position, the upper edge (28) of the auxiliary jet point (12) is close to the lower section of the U-shaped weft insertion channel at the reed. When the auxiliary jet (8) is installed, the bulge (13) is at a gap of not more than 3 mm from the lower section of the U-shaped weft insertion channel. In position, the upper edge (28) of the point (12) penetrates into the shed formed by the opened warps, at an acute angle (H) to the lower warp plane (18), and the section of the upper edge (28) away from the reed is in contact with the other warp plane (18). The upper edge (28) of the point (12) has a length which is greater than the gap between welded points in a weft yarn composed of a number of single filaments.

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CPC (source: EP KR US)  
**D03D 47/30** (2013.01 - KR); **D03D 47/302** (2013.01 - EP US)

Citation (search report)  
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• [X] NL 1001277 C1 19970326 - TE STRAKE BV [NL]  
• [X] CH 650035 A5 19850628 - SULZER AG  
• [X] PATENT ABSTRACTS OF JAPAN vol. 0143, no. 04 (C - 0734) 29 June 1990 (1990-06-29)

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**WO 0063473 A1 20001026**; AT E261011 T1 20040315; AT E369451 T1 20070815; BE 1012608 A3 20010109; CN 1116459 C 20030730; CN 1355862 A 20020626; DE 50005517 D1 20040408; DE 50014554 D1 20070920; EP 1169503 A1 20020109; EP 1169503 B1 20040303; EP 1428918 A2 20040616; EP 1428918 A3 20040901; EP 1428918 B1 20070808; ES 2213014 T3 20040816; KR 100634900 B1 20061017; KR 20010113775 A 20011228; US 6536482 B1 20030325

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