

Title (en)

Tube pump and ink-jet recording device using it

Title (de)

Rohrpumpe und Farbstrahlaufzeichnungsvorrichtung mit dieser Rohrpumpe

Title (fr)

Pompe à tube et appareil d'enregistrement par jet d'encre équipé d'une telle pompe

Publication

EP 0818317 A2 19980114 (EN)

Application

EP 97111766 A 19970710

Priority

JP 18253496 A 19960711

Abstract (en)

A tube pump for use in an ink-jet recording device comprises: a rotor plate (104) mounted for rotation about a first axis, a flexible tube (103) adapted to be inserted in an ink path of said recording device, a tube guide (106A) having an arcuate shape concentric to said first axis, part of said tube being mounted on the tube guide, a lever (107) pivotally mounted on said rotor plate (104) about a pivot axis parallel to said first axis, a roller (105) mounted on the lever for rotation about a second axis parallel to but radially displaced from said first axis, and urging means (108) urging the lever toward the circumference of said rotor plate. The roller (105) is shiftable relative to the lever between a first position and a second position wherein, in the second position, the second axis is closer to the first axis than in said first position. When the rotor plate is rotated in one direction and the roller is turned to a location inside the angular range of said arcuate tube guide (106A), it is moved to its first position and elastically pressed against said tube (103) backed by said tube guide so as to close the tube. When the rotor plate is rotated in the opposite direction the roller is moved to the second position and the pressure on the tube is relieved. <IMAGE>

IPC 1-7

B41J 2/175

IPC 8 full level

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CPC (source: EP)

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Cited by

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