

Title (en)
Thermal roller using heat pipe.

Title (de)
Heizwalze mit Wärmerohr.

Title (fr)
Rouleau thermique utilisant un tube de chauffe.

Publication
EP 0612617 A1 19940831 (EN)

Application
EP 93102544 A 19930218

Priority
EP 93102544 A 19930218

Abstract (en)
A roller having a solid or hollow roller body (3) and one or more heat pipes (10) disposed along a central axis of the roller body from its one end. A portion (12) of the heat pipe is extended from the roller body (3). The extended portion (12) of the heat pipe has thereon a radiation device (13) which is prepared as to be a fin type. When heating the roller, the extended portion (12) of the heat pipe (10) will be utilized as an heat-inlet section, so that the applied heat is transmitted to the roller body (3). While, cooling the roller, the mentioned heat-inlet section is then used as a radiation device to release the heat from the roller body (3). <IMAGE>

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B41F 31/00 (2006.01); **F28D 15/02** (2006.01)

CPC (source: EP)
B41F 31/002 (2013.01); **F28D 15/0208** (2013.01); **F28D 15/0275** (2013.01); **F28F 1/14** (2013.01)

Citation (applicant)
• JP S635944 A 19880111 - KUROSAWA SEIICHI
• JP H0321453 A 19910130 - MITSUBISHI HEAVY IND LTD

Citation (search report)
• [A] PATENT ABSTRACTS OF JAPAN vol. 008, no. 182 (M-319)(1619) 22 August 1984 & JP-A-59 073952 (TOPPAN INSATSU K.K.)
• [AD] PATENT ABSTRACTS OF JAPAN vol. 012, no. 201 (M-707)(3048) 10 June 1988 & JP-A-63 005944 (SEIICHI KUROSAWA)
• [AD] PATENT ABSTRACTS OF JAPAN vol. 015, no. 142 (M-1101)10 April 1991 & JP-A-03 021453 (MITSUBISHI HEAVY IND LTD)

Cited by
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