

Title (en)
Extended nip press roll

Title (de)
Schuhpresswalze

Title (fr)
Rouleau de pressage à pincage prolongé

Publication
EP 1098033 A3 20011107 (DE)

Application
EP 00120830 A 20000925

Priority
DE 19953474 A 19991105

Abstract (en)
[origin: EP1098033A2] The shoe press roller to extract water from a wet fiber web, in the prodn. of paper or cardboard or tissue, has a transfer zone (9) at the press gap (3) with its concave curvature. The transfer zone starts with a zone (10) with a relatively large convex curve radius, and has an end zone (11) with a convex curvature of a relatively small curve radius. The roller mantle (2) runs over at least one guide (12) at the transfer zone (9), combined with the press unit (4) and pref. in a one-piece structure. The transfer zone (9) has at least one intermediate zone (13) with a convex curvature, between the start (10) and end (11) zones. The curve radius of the intermediate zone (13) is larger than the curve radius of the start (10) and end (11) zones. The intermediate zone (13) can be flat. The start zone (10) is relatively short, and pref. significantly shorter than the length of the intermediate zone (13). The surface of the roller mantle (2) has grooves and/or blind drillings. The water trap is a gutter (8), with suction. An additional belt, as a water extraction or transfer belt (14), is between the web (1) and the counter roller (6). The continuous belts (7,14) are blankets or fourdriniers, with the web between them.

IPC 1-7
D21F 3/02

IPC 8 full level
D21F 3/02 (2006.01)

CPC (source: EP US)
D21F 3/0218 (2013.01 - EP US)

Citation (search report)

- [X] WO 9945195 A1 19990910 - VALMET CORP [FI], et al
- [A] US 4570314 A 19860218 - HOLIK HERBERT [DE], et al
- [A] DE 8805966 U1 19890907
- [PA] DE 19833423 A1 20000127 - VOITH SULZER PAPIERTECH PATENT [DE]

Designated contracting state (EPC)
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EP 1098033 A2 20010509; EP 1098033 A3 20011107; DE 19953474 A1 20010510; US 6383338 B1 20020507

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