

Title (en)
Apparatus for embossing a fibrous web

Title (de)
Vorrichtung zum Prägen eines Faserbandes

Title (fr)
Dispositif pour gaufrer une bande fibreuse

Publication
EP 0498623 B1 19980107 (EN)

Application
EP 92300943 A 19920204

Priority
US 65021191 A 19910204

Abstract (en)
[origin: EP0498623A2] An apparatus for embossing a fibrous web includes a mated pair of resilient and rigid embossing rolls 50,54 wherein the resilient roll 54 is formed e.g. by laser burning, with recesses 56 adapted to receive protuberances 52 on the rigid male embossing roll 50 when the rolls are placed in contact. By providing recesses on the resilient roll, the pressure or force required for causing the resilient material, e.g. rubber, to flow around the protuberances can be significantly decreased as compared to conventional rubber to steel embossing. As a result, wear on the rolls is reduced, and smaller diameter rolls may be utilized, thereby reducing the cost of the embossing equipment. In addition, since less pressure is required to cause the rubber to flow about the protuberances, roll deflection is not a problem, and an embossed pattern can be imparted having a consistent, high degree of definition across the width of a web. <IMAGE>

IPC 1-7
B31F 1/07; **B29C 59/04**

IPC 8 full level
B31F 1/07 (2006.01)

CPC (source: EP)
B31F 1/07 (2013.01); **B31F 2201/072** (2013.01); **B31F 2201/0728** (2013.01); **B31F 2201/0738** (2013.01); **B31F 2201/0743** (2013.01); **B31F 2201/0764** (2013.01); **B31F 2201/0774** (2013.01); **B31F 2201/0797** (2013.01)

Cited by
EP0816058A3; CN114375513A; EP1208965A3; US5861082A; EP1571257A1; US5356364A; FR2700496A1; US5686168A; EP1275495A1; EP0836928A1; DE4415291A1; US5957826A; US5846379A; US5580423A; US5637194A; EP0672402A1; US5622734A; US5698291A; GB2377674A; GB2377674B; US5904811A; US5855739A; EP3187340A1; US7691232B2; WO9323240A3; WO9415776A1; WO2006036586A3; WO0069622A1; US6729869B2; US6173496B1; US6832547B2; EP1232854B1; EP1372946A1

Designated contracting state (EPC)
DE ES FR GB IT

DOCDB simple family (publication)
EP 0498623 A2 19920812; **EP 0498623 A3 19930331**; **EP 0498623 B1 19980107**; CA 2060567 A1 19920805; CA 2060567 C 19970610; DE 69223822 D1 19980212; DE 69223822 T2 19980423; ES 2110468 T3 19980216

DOCDB simple family (application)
EP 92300943 A 19920204; CA 2060567 A 19920203; DE 69223822 T 19920204; ES 92300943 T 19920204