

Title (en)

Drawing unit for a drawing machine and method of drawing a product using said drawing unit

Title (de)

Zugeinheit für eine Ziehmaschine und Verfahren zum Ziehen eines Ziehgutes mit dieser Zugeinheit

Title (fr)

Unité d'étirage pour une machine d'étirage et procédé d'étirage d'un produit en utilisant ladite unité

Publication

EP 1256393 B1 20050706 (DE)

Application

EP 02009516 A 20020426

Priority

DE 10122657 A 20010510

Abstract (en)

[origin: EP1256393A2] Drawing unit comprises: (a) a drawing tool (1); and (b) carriages (3, 4) which move backward and forward along a machine frame (5). The carriages have drives each having a controlled linear motor complex for independent movement of each carriage. Independent claims are also included for: (I) a process for drawing a material in a drawing unit; and (II) a drawing machine containing a drawing unit.

IPC 1-7

B21C 1/30; **B21C 1/20**; **B21C 1/28**

IPC 8 full level

B21C 1/28 (2006.01); **B21C 1/16** (2006.01); **B21C 1/20** (2006.01); **B21C 1/30** (2006.01)

CPC (source: EP KR US)

B21C 1/20 (2013.01 - EP KR US); **B21C 1/30** (2013.01 - EP US); **B21C 1/305** (2013.01 - EP US)

Cited by

EP1514617A1; DE10204519A1; CN103639213A; WO03066250A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

EP 1256393 A2 20021113; **EP 1256393 A3 20031008**; **EP 1256393 B1 20050706**; AT E299051 T1 20050715; CA 2385648 A1 20021110; CN 1250353 C 20060412; CN 1385258 A 20021218; DE 10122657 A1 20021121; DE 10122657 B4 20060713; DE 50203543 D1 20050811; JP 2003001319 A 20030107; JP 3975117 B2 20070912; KR 20020086235 A 20021118; PL 353781 A1 20021118; RU 2252092 C2 20050520; US 2002189315 A1 20021219; US 6715332 B2 20040406

DOCDB simple family (application)

EP 02009516 A 20020426; AT 02009516 T 20020426; CA 2385648 A 20020509; CN 02122192 A 20020510; DE 10122657 A 20010510; DE 50203543 T 20020426; JP 2002134474 A 20020509; KR 20020024601 A 20020504; PL 35378102 A 20020509; RU 2002112419 A 20020508; US 14372702 A 20020509