

Title (en)

Method and device for connecting adjacent objects equipped with holes to each other

Title (de)

Verfahren und Vorrichtung zum Verbinden von untereinander dicht benachbarten durchlöcherten Gegenständen

Title (fr)

Procédé et dispositif pour connecter entre eux des objets adjacents équipés de trous

Publication

EP 1314674 A2 20030528 (EN)

Application

EP 02079021 A 20020930

Priority

FI 20012280 A 20011122

Abstract (en)

A method is disclosed for connecting adjacent objects (1) such as paper rolls to each other, the method comprising the step of inserting a bushing (3) through the center bores of at least two adjacent paper rolls. The method is implemented by way of moving the parts of the bushing (3) formed by at least two parts in the bore of the objects relative to each other, whereby the parts are guided by the mating division surfaces (A, B) of the bushings, at least one of the mating surfaces having a spiraling shape, in the longitudinal axis direction of the bushing so that the outer diameter (U) of the bushing increases thus causing the bushing to expand tight in the center bores of the objects (1). The invention also concerns a device for connecting objects (1) to each other. <IMAGE>

IPC 1-7

B65H 75/18; **B65D 21/02**; **B65D 85/672**

IPC 8 full level

B65D 71/50 (2006.01); **B65H 75/18** (2006.01)

CPC (source: EP US)

B65D 71/502 (2013.01 - EP US); **B65H 75/18** (2013.01 - EP US); **B65H 75/185** (2013.01 - EP US); **B65H 2701/5112** (2013.01 - EP US); **B65H 2701/534** (2013.01 - EP US)

Cited by

EP1733982A1; WO2006118523A1; US8302897B2; US8695801B2

Designated contracting state (EPC)

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

DOCDB simple family (publication)

EP 1314674 A2 20030528; **EP 1314674 A3 20030917**; **EP 1314674 B1 20051207**; AT E312045 T1 20051215; BR 0204765 A 20030916; CA 2407444 A1 20030522; DE 60207807 D1 20060112; DE 60207807 T2 20060831; FI 113797 B 20040615; FI 20012280 A0 20011122; FI 20012280 A 20030523; US 2003094391 A1 20030522

DOCDB simple family (application)

EP 02079021 A 20020930; AT 02079021 T 20020930; BR 0204765 A 20021121; CA 2407444 A 20021010; DE 60207807 T 20020930; FI 20012280 A 20011122; US 27427802 A 20021018