

Title (en)

MAKING ROUNDED CLUSTERS OF FIBERS.

Title (de)

HERSTELLUNG VON SPHÄRISCHEN FASERAGGREGAT.

Title (fr)

FABRICATION DE GRAPPES DE FIBRES ARONDIES.

Publication

EP 0524221 B1 19941214

Application

EP 91907407 A 19910409

Priority

- US 9102268 W 19910409
- US 50887890 A 19900412

Abstract (en)

[origin: WO9116484A1] Ball-shaped and other rounded fiber clusters that have a density that may be controlled, as desired, with good uniformity of size and density, may be obtained from staple fiber that has been crimped mechanically, as well as from spirally-crimped polyester staple fiber, by an improved process and apparatus at a high through put.

IPC 1-7

D04H 1/00

IPC 8 full level

B68G 1/00 (2006.01); **D04H 1/00** (2006.01); **D04H 1/02** (2006.01)

CPC (source: EP)

D04H 1/02 (2013.01); **D04H 1/435** (2013.01); **D04H 1/70** (2013.01)

Designated contracting state (EPC)

CH DE ES FR GB IT LI

DOCDB simple family (publication)

WO 9116484 A1 19911031; AU 7680291 A 19911111; CA 2079225 A1 19911013; CN 1027386 C 19950111; CN 1058818 A 19920219; DE 69105966 D1 19950126; DE 69105966 T2 19950524; DE 69105966 T3 19990617; EP 0524221 A1 19930127; EP 0524221 B1 19941214; EP 0524221 B2 19981028; ES 2067226 T3 19950316; ES 2067226 T5 19990301; IE 911213 A1 19911023; JP H05505958 A 19930902; PT 97344 A 19930730

DOCDB simple family (application)

US 9102268 W 19910409; AU 7680291 A 19910409; CA 2079225 A 19910409; CN 91103601 A 19910412; DE 69105966 T 19910409; EP 91907407 A 19910409; ES 91907407 T 19910409; IE 121391 A 19910411; JP 50744191 A 19910409; PT 9734491 A 19910411