

Title (en)

Method and apparatus for continuous cutting of a strand or tow material

Title (de)

Verfahren und Vorrichtung zum kontinuierlichen Zerschneiden von band- oder strangförmigem Gut

Title (fr)

Procédé et appareil pour couper continuellement un matériau en forme de bande ou de corde

Publication

EP 0555731 B1 19960911 (DE)

Application

EP 93101575 A 19930202

Priority

DE 4203640 A 19920208

Abstract (en)

[origin: EP0555731A1] An improved method and an improved apparatus for the continuous cutting of strip-like or strand-like material, especially of chemical-fibre tows, are described. The apparatus according to the invention comprises a cutting wheel (1) having a plurality of cutting knives (3) which are arranged circularly in a knife mounting (2) and which are arranged at a predetermined distance from one another corresponding to the desired stack, at least one pressure roller (4), for achieving a cutting pressure, acting on the cutting knives (3), on the wound strip-like or strand-like material, an opening and closing device (5), by means of which the pressure roller (4) can be moved a predetermined distance away from the cutting wheel (1) or towards the cutting wheel (1), a setting member (6), by means of which a predetermined distance between the pressure roller (4) and the cutting knife (3) nearest to this pressure roller (4) can be set, a damping member (7), by means of which, in cooperation with the setting member (6), the pressure force exerted by the pressure roller (4) on the strip-like or strand-like material resting on the knives (3) can be adjusted so that the cutting capacity of the apparatus remains virtually unchanged within a predetermined interval of pressure forces, and a distance-measuring device (8), by means of which the distance between the pressure roller (4) and the cutting knife (3) nearest to the pressure roller (4) can be monitored. The cutting method carried out by using this apparatus is characterised by a good constancy of the cutting capacity, by a long service life of the cutting knives and by a uniform quality of the cut material. <IMAGE>

IPC 1-7

D01G 1/04

IPC 8 full level

B26D 1/12 (2006.01); **B26D 1/40** (2006.01); **B65H 19/22** (2006.01); **B65H 19/26** (2006.01); **D01G 1/04** (2006.01)

CPC (source: EP US)

D01G 1/04 (2013.01 - EP US); **Y10S 83/913** (2013.01 - EP US); **Y10T 83/141** (2015.04 - EP US); **Y10T 83/4838** (2015.04 - EP US); **Y10T 83/4844** (2015.04 - EP US)

Cited by

CN104131365A; CN105916644A; EP2974833A1; DE102017002837A1

Designated contracting state (EPC)

AT CH DE ES FR GB IT LI

DOCDB simple family (publication)

EP 0555731 A1 19930818; **EP 0555731 B1 19960911**; AT E142717 T1 19960915; DE 59303694 D1 19961017; ES 2092706 T3 19961201; JP H05279925 A 19931026; US 5398575 A 19950321

DOCDB simple family (application)

EP 93101575 A 19930202; AT 93101575 T 19930202; DE 59303694 T 19930202; ES 93101575 T 19930202; JP 1888393 A 19930205; US 1362693 A 19930204