Title (en)

FIBRE GUIDE CHANNEL

Title (de

FASERLEITKANAL

Title (fr)

CANAL DE GUIDAGE DE FIBRES

Publication

EP 1685283 B1 20070718 (DE)

Application

EP 04741356 A 20040803

Priority

- EP 2004008670 W 20040803
- DE 10348710 A 20031016

Abstract (en)

[origin: DE10348710A1] The outlet opening (26) of the fiber guide channel (11) has a maximum extent (L). The entry opening (25) of this channel has a maximum extent (B). These dimensions (L, B) are rotated about the notional center line (28) of the guide channel, through a right angle, plus or minus 15[deg]. Between inlet and outlet openings, the zone Z is approximately cylindrical. The cross section of the channel reduces continuously from the inlet opening to the Z zone. In zone Z, the channel cross section is circular. In the last third of the fiber guide channel, there is flattened curvature in the direction of rotor rotation. The inner wall (34) of this region has greater curvature than the opposite wall (35). Cross sectional area over the entire channel length, is independent of channel shape. Its magnitude is selected for sufficient air throughput for the spinning process. The fiber guidance channel is in two parts. The channel assembly is further detailed. The wall (27) adjacent to the spinning rotor opening (38) near the outlet opening, is arranged such that the sliding surface (36) of the spinning rotor against the fiber surface during spinning, adjusts to a fiber-free ring of no less than 0.5 mm. Height (H) of the fiber guidance channel outlet opening is 1.5-4.5 mm.

IPC 8 full level

D01H 4/38 (2006.01)

CPC (source: EP US)

D01H 4/38 (2013.01 - EP US)

Designated contracting state (EPC)

CZ DE IT TR

DOCDB simple family (publication)

**DE 10348710 A1 20050512**; BR PI0414407 A 20061114; CN 1867708 A 20061122; DE 502004004388 D1 20070830; EP 1685283 A1 20060802; EP 1685283 B1 20070718; US 2007148269 A1 20070628; US 7347040 B2 20080325; WO 2005047579 A1 20050526

DOCDB simple family (application)

**DE 10348710 A 20031016**; BR PI0414407 A 20040803; CN 200480029953 A 20040803; DE 502004004388 T 20040803; EP 04741356 A 20040803; EP 2004008670 W 20040803; US 57611404 A 20040803