

Title (en)

Fiber bundle concentrating apparatus in spinning machine

Title (de)

Vorrichtung zum Konzentrieren von Faserbündeln in einer Spinnmaschine

Title (fr)

Appareil de concentration de faisceaux de fibres pour machine à filer

Publication

EP 2045377 A1 20090408 (EN)

Application

EP 08165458 A 20080930

Priority

JP 2007261770 A 20071005

Abstract (en)

A fiber bundle concentrating apparatus 30 includes a guide member 31, which guides a fiber bundle such that the width of the fiber bundle is reduced toward an advancing direction of the fiber bundle, and an excitation device 32, which vibrates the guide member 31 so as to generate sound pressure that acts on the fiber bundle in a direction to reduce the width of the fiber bundle. The guide member 31 includes two vibration plates 41 arranged to face each other. Each vibration plate 41 includes a guide portion 41c, which forms a guide passage 44 the cross-sectional area of which is smaller at the outlet than at the inlet, and a support plate portion 41a, 41b, which has a proximal end coupled to a transducer 37 of the excitation device 32 and a distal end at which the guide portion 41c is integrally formed. Each guide portion 41c is formed into a shape that permits the sound pressure to act on the fiber bundle that pass at least the inlet guide passage 44b of the guide passage 44 from a side corresponding to an opposing surface 45a that faces the other guide portion and from a side corresponding to a surface 45b that intersects the opposing surface.

IPC 8 full level

D01H 5/72 (2006.01)

CPC (source: EP)

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Citation (applicant)

JP 2007009391 A 20070118 - TOYOTA IND CORP

Citation (search report)

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- [E] EP 2006427 A2 20081224 - TOYOTA JIDOSHOKKI KK [JP]
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- [PA] JP 2008115491 A 20080522 - TOYOTA IND CORP
- [A] JP H01298229 A 19891201 - NIHON METAL GASKET
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CN103448452A; CN103201419A; CN103469393A

Designated contracting state (EPC)

CH DE IT LI

Designated extension state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

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