Title (en)

DEVICE FOR GUIDING BANDS IN A SUSPENDED MANNER

Title (de)

VORRICHTUNG ZUR SCHWEBENDEN FÜHRUNG VON BÄNDERN

Title (fr)

DISPOSITIF POUR LE GUIDAGE PAR SUSTENTATION DE BANDES

Publication

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Application

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Priority

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Abstract (en)

[origin: US6413470B1] The invention relates to a device for guiding bands in a suspended manner and for stabilizing bands, preferably wide metal bands, for the purpose of heat treating the same. In the device, the band is blown on both sides with the aid of suspended nozzle sections, and two respective radial ventilators with 360° spiral casings are arranged on the side walls of the device in the vicinity of both sides of the band. The intake openings of the radial ventilators point toward the middle of the device. The axes of the radial ventilators are vertical in relation to the side walls, and the radial ventilators are arranged in such a way that they deliver air into air delivery channels (6) of the length of at least one hydraulic diameter in a manner parallel to the longitudinal direction of the device, that is, in a direction of movement of the band. The air delivery channels (6) are adjacent to the upper casing (8) or the lower casing of the device via a side wall. Elbows are respectively connected to the air delivery channels (6). The volume stream delivered from said elbows by the radial ventilator enters a collecting receptacle which extends as at least one piece over the entire length of the device and which is provided with the nozzle section on the side facing the band, said nozzle field being approximately equal in width to that of the collecting receptacle. The gas stream blown on the band predominantly flows away and up to the longitudinal sides of the device and enters from the sides of the device into the suction area between the radial ventilators above and below the band (1).

IPC 1-7

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CPC (source: EP US)

C21D 9/63 (2013.01 - EP US); **F26B 13/104** (2013.01 - EP US); B21B 39/00 (2013.01 - EP US); B21B 2045/0212 (2013.01 - EP US)

Citation (search report)

See references of WO 9940230A1

Cited by

WO2012164056A1; DE102011103806B3; DE102004054393B3; DE10326071A1; DE10326071B4; DE202011105018U1

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