Title (en)

Open-end spinning machine with a spinning rotor and method for manufacturing a yarn

Title (de)

Offenend-Spinnvorrichtung und Spinnrotor sowie Verfahren zur Garnherstellung

Title (fr)

Métier à filer à bout libre comprenant un rotor de filature et procédé de filage

Publication

EP 1422325 B1 20080423 (DE)

Application

EP 03026400 A 20031119

Priority

DE 10254272 A 20021121

Abstract (en)

[origin: EP1422325A2] An open-end spinning unit has a rotor (3) with an insert (18), which rotates in the same direction (29) as the rotor, but with a speed lag corresponding to that of the yarn formation zone (26). The insert (18) has a channel (20) to guide the yarn between rotor groove (25) and draw-off tube so that the curve of the yarn leg (27) is supported under all conditions in a direction opposed to the rotor rotation. Independent claims are also included for the following: (1) A rotor with an insert of this kind operating with a lagging yarn formation zone (26) and a drive that ensures that the rotational delay of the insert corresponds to that of the yarn formation zone; (2) A spinning process of this kind using a rotor assembly with an insert driven in this manner. The insert (18) can rotate freely on bearings attached to the rotor shaft, but is linked to the rotor rotation by permanent magnets (21) placed in the insert. At start-up the rotor and insert rotate at the same speed but as soon as yarn is formed and drawn off, the drag of the yarn automatically delays the insert so that it rotates at the correct speed.

IPC 8 full level

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CPC (source: EP US)

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Designated contracting state (EPC)

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