

Title (en)

Process and apparatus for spinning, drawing and winding up of a yarn

Title (de)

Verfahren und Vorrichtung zum Spinnen, Verstrecken und Aufwickeln eines Fadens

Title (fr)

Procédé et dispositif pour le filage, l'étirage et le bobinage d'un fil

Publication

EP 0940485 A2 19990908 (DE)

Application

EP 99102844 A 19990301

Priority

DE 19809381 A 19980305

Abstract (en)

In the operation of spinning, drawing and winding a synthetic filament yarn, the spun filaments are eddied in an eddy jet within the drawing zone and before it leaves the drawing godet. The filament material passes a number of times round the drawing godet and a deflection roller, to be eddied at the final wound coil between the godet and the deflection roller. The filament material is heated by the godet mantle directly before it is eddied in the jet, where a hot air stream is aligned along or against the direction of travel. The filament material is also eddied before it enters the drawing zone. An Independent claim is included for a filament spinning assembly with an eddy jet (21) in front of the final drawing godet (19) in the drawing zone (2), in the direction of travel. Preferred Features: The final drawing godet has a deflection roller (20), forming a drawing godet unit (16), where the filament material (14) passes round them a number of times. The eddy jet is between the godet and deflection roller in the direction of travel, at the final coil winding before it leaves the godet. The mantle surface of the drawing godet has a roughness where the final coil winding lies which is less than at the remaining mantle surface. The godet mantle has a smaller diameter for the final filament coil winding than at the other godet mantle surface zones. The eddy jet has a filament channel to guide and eddy the filament material. An air channel opens into the filament channel, to form an included angle between the channels of ≤ 90 degrees in the direction of travel. The drawing godet has a heater to give a heated mantle. The drawing godet and deflection roller of the drawing godet unit have their own drives. An eddy jet can be in the filament path between the spinning station (1) and the drawing zone.

Abstract (de)

Es ist ein Verfahren und eine Vorrichtung zum Spinnen, Verstrecken und Aufwickeln eines synthetischen Fadens beschrieben. Hierbei wird eine Vielzahl von Filamenten in einer Spinnzone zu einem Faden zusammengefaßt. Anschließend wird der Faden in einer Streckzone mittels einer Streckgalette verstreckt und in einer Aufwickelzone zu einer Spule aufgewickelt. Um den Fadenschluß herzustellen, werden die Filamente innerhalb der Streckzone vor Ablauf des Fadens von der Streckgalette verwirbelt.

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Cited by

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