

Title (en)

Process and apparatus for eliminating liquid from filaments running at high speed

Title (de)

Verfahren und Vorrichtung zum Entfernen von Flüssigkeit von schnellaufenden Fäden

Title (fr)

Procédé et dispositif pour l'élimination de liquides de filaments entraînés à grande vitesse

Publication

EP 0457719 B1 19960619 (DE)

Application

EP 91810292 A 19910418

Priority

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Abstract (en)

[origin: EP0457719A1] Superfluous liquid is removed from a filament running at high speed when the filament is deflected in such a way that the liquid is flung off, when the flung off liquid is guided away from the filament, when the filament is guided through a closed chamber in which a vacuum is created to facilitate evaporation of the liquid, and when the filament is guided through a narrow slit, so that the layer of air running with the filament and immediately surrounding it is peeled off. The combination of these effects bringing about drying constitutes one process step. Advantageously, this process step is repeated several times in immediate succession, so that even with a small filament-preserving deflection angle good filament drying can be achieved. A device consisting of a plurality of chambers (K.1-3) arranged one after another in filament running direction serves to carry out the process according to the invention, in that the filament is deflected during entry into and/or exit from each chamber by a guide element (U.1-4) and passes through a narrow slit (S.1-4). The chamber walls (20.1-4), carrying the filament passage, are inclined away from the filament in the direction of gravity. Driven by gravity, the flung off liquid flows through appropriate passages, connecting the chamber among each other, into the last chamber in running direction of the filament from where it is removed by suction. <IMAGE>

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