

Title (en)

Method and apparatus for heating a synthetic yarn

Title (de)

Verfahren und Vorrichtung zum Heizen eines synthetischen Fadens

Title (fr)

Procédé et dispositif pour le chauffage d'un fil synthétique

Publication

EP 0754790 A3 20010919 (DE)

Application

EP 96110889 A 19960705

Priority

- DE 19526265 A 19950719
- DE 19530817 A 19950823
- DE 19542769 A 19951116

Abstract (en)

[origin: EP0754790A2] Process for spinning, drawing and winding up synthetic yarn (1) with multistage heating in the draw zone, comprises: (i) in the first stage of heating to the glass transition temp. partially wrapping the yarn (1) round a surface (32), i.e. a roll, plate or pin; (ii) followed by a second stage with an extended hot surface (117); where: (a) the surface temp. of the heating surface(s) (32,117) is above the m.pt. of the fibre material, pref. by more than 100 Kelvin, pref. by 200 - 300 Kelvin; and (b) in the draw zone the yarn is subjected to the draw tension needed for plastic deformation in or immediately after the first heating stage. Also claimed is the apparatus for this process.

IPC 1-7

D02J 13/00; **D02J 1/22**; **D01D 5/16**; **D01D 10/02**

IPC 8 full level

D02J 1/22 (2006.01); **D02J 13/00** (2006.01)

CPC (source: EP KR US)

D01D 5/084 (2013.01 - KR); **D01D 5/098** (2013.01 - KR); **D01D 10/02** (2013.01 - KR); **D02J 1/228** (2013.01 - EP US); **D02J 13/005** (2013.01 - EP US)

Citation (search report)

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Designated contracting state (EPC)

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EP 0754790 A2 19970122; **EP 0754790 A3 20010919**; **EP 0754790 B1 20061004**; CN 1074472 C 20011107; CN 1145959 A 19970326; DE 59611386 D1 20061116; KR 970006555 A 19970221; TW 320654 B 19971121; US 5783127 A 19980721; US 6012912 A 20000111

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