

Title (en)

Composite filament yarn and process and spinneret for manufacturing the same.

Title (de)

Garn aus zusammengesetzten Fäden, Verfahren und Spinnndüse zur Herstellung.

Title (fr)

Fil de filaments composés, procédé et filière pour leur fabrication.

Publication

**EP 0378194 A2 19900718 (EN)**

Application

**EP 90100443 A 19900110**

Priority

- JP 529989 A 19890112
- JP 32408989 A 19891215
- JP 32821389 A 19891220

Abstract (en)

A polyamide/polyurethane composite filament yarn, which filament comprises a polyamide sheath component and a polyurethane eccentric core component exposed with a neck portion of uniform width on the surface of the filament, is manufactured by a process comprising inserting, immediately before extruding from a spinneret orifice, a molten polyurethane flow obliquely from upwards and incorporating said polyurethane flow eccentrically into a molten polyamide flow flowing down in said conduit, while a small part of said polyurethane flow radially projected in a restricted width penetrating through the thinnest portion of said polyamide flow flows down along the inner wall of said conduit. For this process, an employable spinneret comprises a leading duct for polyamide connecting to an orifice via a vertical conduit, another leading duct for polyurethane connecting to an injection pipe obliquely extending therefrom, protruding into said conduit, opening immediately before said orifice and having a slit extending longitudinally at the under side along the entire protruded length.

IPC 1-7

**D01D 5/34**; **D01F 8/12**

IPC 8 full level

**D01D 5/34** (2006.01); **D01F 8/12** (2006.01)

CPC (source: EP)

**D01D 5/34** (2013.01); **D01F 8/12** (2013.01)

Cited by

US5603888A; CN109338486A; CN115896965A; DE102004004251A1; CN110016732A; US5972502A

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

**EP 0378194 A2 19900718**; **EP 0378194 A3 19901031**; **EP 0378194 B1 19960410**; DE 378194 T1 19910613; DE 69026393 D1 19960515; DE 69026393 T2 19960919

DOCDB simple family (application)

**EP 90100443 A 19900110**; DE 69026393 T 19900110; DE 90100443 T 19900110