

Title (en)
Method and apparatus for producing polymer fibers and fabrics including multiple polymer components in a closed system

Title (de)
Verfahren und Vorrichtung zur Herstellung von Polymerfasern und Gewebe mit mehrfachen Polymerkomponenten in einem geschlossenen System

Title (fr)
Procédé et appareil pour produire des fibres et tissus polymères comprenant des composés en polymère multiple dans un système fermé

Publication
EP 1959034 A1 20080820 (EN)

Application
EP 07003306 A 20070216

Priority
EP 07003306 A 20070216

Abstract (en)
A closed fiber spinning system includes a spin beam assembly including a plurality of polymer distribution manifolds to independently deliver different polymer component fluid streams to a spin pack and independently maintain those fluid streams at different temperatures. The spin beam assembly in combination with the closed spinning system facilitates the production of a wide variety of multiple polymer component fiber and fabric products having a desired denier and degree of uniformity.

IPC 8 full level
D01D 5/08 (2006.01); **D04H 3/00** (2012.01); **D01D 5/00** (2006.01); **D01D 5/30** (2006.01); **D01F 6/00** (2006.01); **D01F 8/04** (2006.01); **D04H 3/005** (2012.01); **D04H 3/11** (2012.01)

CPC (source: EP KR)
D01D 5/08 (2013.01 - KR); **D01D 5/30** (2013.01 - EP KR); **D01D 13/02** (2013.01 - EP); **D01F 6/00** (2013.01 - KR); **D01F 8/04** (2013.01 - KR)

Citation (search report)

- [X] US 2002063364 A1 20020530 - TAYLOR THOMAS B [US], et al
- [X] EP 1239065 A1 20020911 - NORDSON CORP [US]
- [X] US 2005233018 A1 20051020 - BAUMEISTER MICHAEL [DE]
- [A] US 4997611 A 19910305 - HARTMANN LUDWIG [DE]
- [A] US 5700491 A 19971223 - HERWEGH FELIX [DE], et al
- [A] DE 10143070 A1 20020529 - BARMAG BARMER MASCHF [DE]
- [A] EP 0747516 A2 19961211 - BASF CORP [US]

Cited by
CN102925992A; CN109056085A; CN111194363A; EP3382082A1; CN108708078A; WO2014104955A1; US11913151B2; US11591728B2; EP3521496B1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK RS

DOCDB simple family (publication)
EP 1959034 A1 20080820; EP 1959034 B1 20140402; EP 1959034 B8 20141029; AR 065364 A1 20090603; BR PI0803731 A2 20090422; BR PI0803731 B1 20181023; CA 2621712 A1 20080816; CA 2621712 C 20110503; CN 101368317 A 20090218; CN 101368317 B 20110608; DK 1959034 T3 20140707; ES 2477318 T3 20140716; IL 189552 A0 20081229; IL 189552 A 20110731; JP 2009019321 A 20090129; JP 5197055 B2 20130515; KR 100977024 B1 20100819; KR 20080076855 A 20080820; MX 2008002191 A 20090225; PL 1959034 T3 20141128; RU 2008105796 A 20090827; RU 2384659 C2 20100320

DOCDB simple family (application)
EP 07003306 A 20070216; AR P080100647 A 20080215; BR PI0803731 A 20080218; CA 2621712 A 20080215; CN 200810096368 A 20080215; DK 07003306 T 20070216; ES 07003306 T 20070216; IL 18955208 A 20080217; JP 2008034813 A 20080215; KR 20080014466 A 20080218; MX 2008002191 A 20080215; PL 07003306 T 20070216; RU 2008105796 A 20080215