

Title (en)
Process and apparatus for forming fibers.

Title (de)
Verfahren und Apparat zum Formen von Fasern.

Title (fr)
Procédé et appareil pour former des fibres.

Publication
EP 0401829 A2 19901212 (EN)

Application
EP 90110818 A 19900607

Priority
US 36273789 A 19890607

Abstract (en)
An apparatus (10) for forming a nonwoven web (26) from a fiber forming thermoplastic polymer resin which includes a reservoir (12) for supplying a quantity of melted fiber forming thermoplastic resin, a pump (14) for pumping the molten resin to a fiber forming die (16) and a die for forming a discrete resin stream to flow therefrom. The die includes a first fluid passageway (20) for forming a stream of fluid, such as air, in contact with and substantially surrounding the formed flow of resin for a predetermined distance within the die (16) and an interrupt system (18) for selectively cycling the flow of resin on and off and clearing the resin from the fiber forming die (16). A receiving belt (21) collects the fibers (22) formed from the resin flow below the first fluid passageway (20) spaced at a predetermined distance (A') from the die (16).

IPC 1-7
D01D 4/02; D01D 5/08; D04H 3/03

IPC 8 full level
D01D 5/08 (2006.01); **D01D 1/09** (2006.01); **D01F 6/06** (2006.01); **D04H 1/56** (2006.01); **D04H 1/72** (2006.01); **D04H 3/16** (2006.01)

CPC (source: EP KR)
D01D 5/08 (2013.01 - KR); **D04H 1/56** (2013.01 - EP); **D04H 1/724** (2013.01 - KR); **D04H 1/736** (2013.01 - KR)

Cited by
EP0701010A1; CN113684610A

Designated contracting state (EPC)
AT BE CH DE DK ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)
EP 0401829 A2 19901212; EP 0401829 A3 19910703; EP 0401829 B1 19950823; AT E126843 T1 19950915; AT E206174 T1 20011015; AU 4176293 A 19930916; AU 5605990 A 19901213; AU 642648 B2 19931028; AU 667918 B2 19960418; BR 9002673 A 19910820; CA 2016289 A1 19901207; CA 2016289 C 20001121; DE 69021781 D1 19950928; DE 69021781 T2 19960111; DE 69033812 D1 20011031; DE 69033812 T2 20020613; EP 0633339 A2 19950111; EP 0633339 A3 19981216; EP 0633339 B1 20010926; ES 2076256 T3 19951101; JP 2911963 B2 19990628; JP 3045497 B2 20000529; JP H0397907 A 19910423; JP H11247062 A 19990914; KR 0128432 B1 19980406; KR 910001131 A 19910130; MY 107297 A 19951031; ZA 903302 B 19920429

DOCDB simple family (application)
EP 90110818 A 19900607; AT 90110818 T 19900607; AT 94115971 T 19900607; AU 4176293 A 19930705; AU 5605990 A 19900529; BR 9002673 A 19900606; CA 2016289 A 19900508; DE 69021781 T 19900607; DE 69033812 T 19900607; EP 94115971 A 19900607; ES 90110818 T 19900607; JP 14843490 A 19900606; JP 637199 A 19990113; KR 900008253 A 19900605; MY PI19900937 A 19900605; ZA 903302 A 19900430