

Title (en)
Synthetic fiber forming apparatus and an associated process for spinning synthetic fibers

Title (de)
Vorrichtung und Verfahren zum Spinnen von synthetischen Fasern

Title (fr)
Dispositif et procédé pour le filage de fibres synthétiques

Publication
EP 1304401 A1 20030423 (EN)

Application
EP 01124823 A 20011018

Priority
EP 01124823 A 20011018

Abstract (en)
A synthetic fiber forming apparatus is disclosed for the manufacture of a variety of synthetic fibers at an improved rate of efficiency and uniformity. The synthetic fiber forming apparatus includes a distribution plate and a metering plate which is positioned downstream of the distribution plate. The distribution plate contains at least one flow path which is in fluid flow connection with at least one exit hole in the distribution plate. The metering plate contains at least one orifice which is desirably positioned immediately downstream of the distribution plate exit hole, and which is adapted to meter the flow of a flowable material therethrough. The metering plate orifice is desirably smaller than the distribution plate exit hole and preferably a plurality of orifices are in fluid flow connection with a single distribution plate exit hole. The metering plate acts to provide a flowable material at a consistent pressure to the spinneret. A process for manufacturing synthetic fibers at a high rate of consistency and uniformity is also described.
<IMAGE>

IPC 1-7
D01D 4/06

IPC 8 full level
D01D 4/06 (2006.01)

CPC (source: EP)
D01D 4/06 (2013.01)

Citation (search report)
• [X] US 3847524 A 19741112 - MOTT L
• [A] US 5575063 A 19961119 - HODAN JOHN A [US], et al
• [A] DE 4211398 A1 19921029 - BARMAG BARMER MASCHF [DE]
• [A] US 4738607 A 19880419 - NAKAJIMA SADAOKI [JP], et al

Cited by
EP1486591A1; CN1322180C; US7156639B2

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
EP 1304401 A1 20030423; EP 1304401 B1 20060621; AT E331057 T1 20060715; DE 60120983 D1 20060803

DOCDB simple family (application)
EP 01124823 A 20011018; AT 01124823 T 20011018; DE 60120983 T 20011018