

Title (en)  
SPINNING DEVICE AND METHOD HAVING COOLING BY BLOWING

Title (de)  
SPINNVORRICHTUNG UND VERFAHREN MIT KÜHLBEBLASUNG

Title (fr)  
DISPOSITIF ET PROCEDE DE FILAGE AVEC SOUFFLERIE DE REFROIDISSEMENT

Publication  
**EP 1463851 A1 20041006 (DE)**

Application  
**EP 02806017 A 20021111**

Priority  
• DE 10200405 A 20020108  
• EP 0212591 W 20021111

Abstract (en)  
[origin: US7364681B2] The present invention relates to an apparatus for producing continuously molded bodies from a molding material, such as a spinning solution containing cellulose, water and tertiary amine oxide. The apparatus ( 1 ) comprises a die plate ( 3 ) including extrusion orifices ( 4 ) through which the molding material is extruded into substantially filament-like continuously molded bodies ( 5 ). The continuously molded bodies ( 5 ) are passed through an air gap ( 6 ) and guided in a precipitation bath ( 9 ) by a deflector ( 10 ) to a bundling means ( 12 ) where they are united into a bundle of fibers. In the air gap, a blowing means ( 14 ) is provided for directing a cooling gas stream ( 15 ) onto the continuously molded bodies ( 5 ) in a direction transverse to the direction of passage ( 7 ). To improve the spinning stability and mechanical properties of the continuously molded bodies, it is intended according to the invention that directly with respect to the extrusion orifices ( 4 ) a first shielding zone ( 20 ) is arranged by which the extrusion orifices are shielded against the action of the cooling gas stream.

IPC 1-7  
**D01D 5/088**; D01D 5/06; D01F 2/00

IPC 8 full level  
**D01D 5/06** (2006.01); **D01D 5/088** (2006.01); **D01F 2/00** (2006.01)

CPC (source: EP KR US)  
**D01D 5/06** (2013.01 - EP US); **D01D 5/088** (2013.01 - EP KR US); **D01F 2/00** (2013.01 - EP US)

Cited by  
EP2743551A1

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

DOCDB simple family (publication)  
**US 2005035487 A1 20050217**; **US 7364681 B2 20080429**; AT E291113 T1 20050415; AU 2002356578 A1 20030724; BR 0215466 A 20041130; CA 2465286 A1 20030717; CN 1325707 C 20070711; CN 1608150 A 20050420; DE 10200405 A1 20020801; DE 50202515 D1 20050421; EP 1463851 A1 20041006; EP 1463851 B1 20050316; KR 100590981 B1 20060619; KR 20040063968 A 20040715; MY 128961 A 20070330; TW 200301789 A 20030716; TW 591135 B 20040611; WO 03057951 A1 20030717; ZA 200405030 B 20050310

DOCDB simple family (application)  
**US 50099804 A 20041007**; AT 02806017 T 20021111; AU 2002356578 A 20021111; BR 0215466 A 20021111; CA 2465286 A 20021111; CN 02826064 A 20021111; DE 10200405 A 20020108; DE 50202515 T 20021111; EP 0212591 W 20021111; EP 02806017 A 20021111; KR 20047007778 A 20021111; MY PI20030047 A 20030107; TW 91137213 A 20021224; ZA 200405030 A 20040624