

Title (en)

EXTRUSION METHOD FOR THE PRODUCTION F STRENGTH-MODIFIED AND PHYLLOSILICATE-REINFORCED THERMOPLASTIC SYSTEMS

Title (de)

EXTRUSIONSVERFAHREN ZUR HERSTELLUNG VON ZÄHMODIFIZIERTEN UND SCHICHTSILIKATVERSTÄRKTEN THERMOPLASTISCHEN SYSTEMEN

Publication

EP 1678241 A1 20060712 (DE)

Application

EP 04766801 A 20040915

Priority

- EP 2004052189 W 20040915
- DE 10348548 A 20031020

Abstract (en)

[origin: WO2005040254A1] The invention relates to an extrusion method for the production of strength-modified and phyllosilicate-reinforced thermoplastic systems. According to the invention, a production method for nanocomposite materials, using the most economic raw materials, which may be easily worked and which do not require a complicate preparation before processing and with establishment of a starting material composition which meets the requirements for a high-performance nanocomposite material, in particular, with regard to rigidity and strength, may be achieved, whereby a strength modifier in the form of a phyllosilicate is added to the compounded system as an essentially aqueous dispersion and the water is at least partly removed from the compounded system during the extrusion.

IPC 1-7

C08J 3/205; C08K 3/34; B29C 47/10

IPC 8 full level

B29C 48/29 (2019.01); **B29C 48/76** (2019.01); **C08J 3/205** (2006.01); **B29C 48/03** (2019.01); **C08L 7/00** (2006.01); **C08L 9/02** (2006.01)

CPC (source: EP US)

B29C 48/022 (2019.01 - EP US); **B29C 48/29** (2019.01 - EP US); **B29C 48/767** (2019.01 - EP US); **C08J 3/2056** (2013.01 - EP US); **B29C 48/03** (2019.01 - EP US); **B29C 48/297** (2019.01 - EP US); **B29K 2077/00** (2013.01 - EP US); **B29K 2105/0005** (2013.01 - EP US); **C08J 2323/12** (2013.01 - EP US); **C08J 2371/02** (2013.01 - EP US); **C08J 2377/00** (2013.01 - EP US); **C08L 7/00** (2013.01 - EP US); **C08L 9/02** (2013.01 - EP US)

Citation (search report)

See references of WO 2005040254A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2005040254 A1 20050506; CN 1871282 A 20061129; DE 10348548 A1 20050519; EP 1678241 A1 20060712; JP 2007508961 A 20070412; US 2006264553 A1 20061123

DOCDB simple family (application)

EP 2004052189 W 20040915; CN 200480030788 A 20040915; DE 10348548 A 20031020; EP 04766801 A 20040915; JP 2006534736 A 20040915; US 57640406 A 20060420