

Title (en)
EXPANDABLE, THERMOPLASTIC POLYMER PARTICLES BASED ON STYRENE POLYMERS AND PROCESS FOR THE PREPARATION THEREOF

Title (de)
EXPANDIERBARE, THERMOPLASTISCHE POLYMERPARTIKEL AUF BASIS VON STYROLPOLYMEREN UND VERFAHREN ZU DEREN HERSTELLUNG

Title (fr)
PARTICULES POLYMÈRES THERMOPLASTIQUES EXPANSIBLES À BASE DE POLYMÈRES DE STYRÈNE ET PROCÉDÉ DE PRÉPARATION ASSOCIÉ

Publication
EP 4237474 A1 20230906 (DE)

Application
EP 21801543 A 20211028

Priority
• EP 20204862 A 20201030
• EP 2021080009 W 20211028

Abstract (en)
[origin: WO2022090403A1] The invention relates to expandable polymer particles based on styrene polymers, to a process for the preparation thereof and to the use of the expandable polymer particles in a molded foam part. The polymer particles contain A) 87 to 99 wt.% of one or more styrene polymers (A), in relation to the total weight of (A), (B) and (C); B) 1 to 10 wt.% of one or more foaming agents (B); C) 0 to 3 wt.% of one or more nucleators or nucleating agents C); and optionally further additives (Z) in amounts which do not impair the domain formation and the foam structure resulting therefrom.

IPC 8 full level
C08J 9/00 (2006.01); **C08J 9/12** (2006.01); **C08J 9/14** (2006.01); **C08J 9/16** (2006.01); **C08J 9/232** (2006.01)

CPC (source: EP KR US)
C08J 9/0066 (2013.01 - EP KR US); **C08J 9/12** (2013.01 - EP KR); **C08J 9/141** (2013.01 - EP KR US); **C08J 9/16** (2013.01 - EP KR US); **C08J 9/232** (2013.01 - EP KR US); **C08J 2201/03** (2013.01 - EP KR US); **C08J 2201/034** (2013.01 - EP KR US); **C08J 2203/14** (2013.01 - EP KR US); **C08J 2325/08** (2013.01 - EP KR); **C08J 2325/12** (2013.01 - EP KR US); **C08J 2355/02** (2013.01 - EP KR US)

Citation (search report)
See references of WO 2022090403A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
WO 2022090403 A1 20220505; CN 116635461 A 20230822; EP 4237474 A1 20230906; KR 20230095084 A 20230628; US 2023407038 A1 20231221

DOCDB simple family (application)
EP 2021080009 W 20211028; CN 202180087521 A 20211028; EP 21801543 A 20211028; KR 20237014652 A 20211028; US 202118250907 A 20211028