

Title (en)

PROCESS FOR PRODUCING EXPANDABLE THERMOPLASTIC BEADS WITH IMPROVED EXPANDABILITY

Title (de)

VERFAHREN ZUR HERSTELLUNG VON EXPANDIERBAREN THERMOPLASTISCHEN PARTIKELN MIT VERBESSERTER EXPANDIERBARKEIT

Title (fr)

PROCÉDÉ POUR PRODUIRE DES PARTICULES THERMOPLASTIQUES EXPANSÉES PRÉSENTANT UNE MEILLEURE APTITUDE À L'EXPANSION

Publication

**EP 2638102 A1 20130918 (DE)**

Application

**EP 11778907 A 20111107**

Priority

- EP 10190893 A 20101111
- EP 2011069489 W 20111107
- EP 11778907 A 20111107

Abstract (en)

[origin: EP2452968A1] Preparing cavities containing expandable thermoplastic polymer particles, comprises (i) extruding a propellant containing polymer melt comprising (in wt.%, based on the propellant containing polymer melt) nucleating agent (0.1-5), propellant (1-10) remaining in the polymer particles, and co-propellant (0.01-5 wt.%) forming cavities, through a die plate, and (ii) granulating it in a liquid filled chamber at a pressure of 1.5-15 bars. An independent claim is also included for cavities containing expandable thermoplastic polymer particles with an average diameter of 0.1-50 mm, obtainable by the above method.

IPC 8 full level

**C08J 9/18** (2006.01); **B29C 44/34** (2006.01); **C08J 9/00** (2006.01); **C08J 9/12** (2006.01); **C08L 25/04** (2006.01)

CPC (source: EP KR)

**B29C 44/50** (2013.01 - KR); **C08J 9/0004** (2013.01 - KR); **C08J 9/0061** (2013.01 - EP); **C08J 9/0066** (2013.01 - EP); **C08J 9/122** (2013.01 - EP); **C08J 9/127** (2013.01 - EP); **C08J 9/141** (2013.01 - EP); **C08J 9/16** (2013.01 - EP); **C08J 9/18** (2013.01 - KR); **C08J 9/232** (2013.01 - EP); **C08L 23/02** (2013.01 - KR); **C08L 25/04** (2013.01 - KR); **C08L 25/08** (2013.01 - KR); **C08L 25/10** (2013.01 - KR); **C08J 2201/03** (2013.01 - EP); **C08J 2203/06** (2013.01 - EP); **C08J 2203/14** (2013.01 - EP); **C08J 2203/202** (2013.01 - EP); **C08J 2205/044** (2013.01 - EP); **C08J 2325/04** (2013.01 - KR); **C08J 2325/06** (2013.01 - EP); **C08J 2423/02** (2013.01 - KR); **C08J 2423/08** (2013.01 - EP); **C08J 2425/08** (2013.01 - KR); **C08J 2425/10** (2013.01 - KR); **C08J 2453/02** (2013.01 - EP)

Citation (search report)

See references of WO 2012062682A1

Citation (examination)

- WO 2009000872 A1 20081231 - BASF SE [DE], et al
- WO 2011086030 A2 20110721 - BASF SE [DE], et al

Designated contracting state (EPC)

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DOCDB simple family (application)

**EP 10190893 A 20101111**; BR 112013011444 A 20111107; CA 2817678 A 20111107; CN 201180053832 A 20111107; EP 11778907 A 20111107; EP 2011069489 W 20111107; JP 2013538139 A 20111107; KR 20137014813 A 20111107; MX 2013005234 A 20111107; TW 100141106 A 2011110