

Title (en)  
FIBER-REINFORCED COMPOSITE MATERIAL HAVING STYRENE (CO)POLYMER AND NATURAL FIBERS

Title (de)  
FASERVERSTÄRKTES KOMPOSIT-MATERIAL MIT STYROL(CO)POLYMER UND NATURFASERN

Title (fr)  
MATÉRIAU COMPOSITE RENFORCÉ PAR DES FIBRES COMPRENANT UN (CO)POLYMÈRE DE STYRÈNE ET DES FIBRES NATURELLES

Publication  
**EP 4297970 A1 20240103 (DE)**

Application  
**EP 22707136 A 20220222**

Priority  
• EP 21158765 A 20210223  
• EP 2022054357 W 20220222

Abstract (en)  
[origin: WO2022180018A1] A fiber-reinforced composite material (K), containing a thermoplastic polymer matrix and at least one natural-fiber component, is technically advantageous if it contains at least 45% (v/v) of a styrene (co)polymer (A) as polymer matrix, 30-55% (v/v) of a natural-fiber sheet material (B) as natural-fiber component, optionally 0-10% (v/v) of an additional polymer component (C), and optionally 0-10% of at least one additive (D), the volume percentages of components (A) to (D) adding up to 100 volume percent of the composite material (K).

IPC 8 full level  
**B32B 27/12** (2006.01); **B32B 5/02** (2006.01); **B32B 5/26** (2006.01); **B32B 7/023** (2019.01); **B32B 27/18** (2006.01); **B32B 27/30** (2006.01)

CPC (source: EP KR US)  
**B29C 70/06** (2013.01 - US); **B29C 70/50** (2013.01 - US); **B32B 5/024** (2013.01 - EP KR); **B32B 5/26** (2013.01 - EP); **B32B 5/263** (2021.05 - EP); **B32B 7/023** (2018.12 - EP); **B32B 27/12** (2013.01 - EP KR); **B32B 27/18** (2013.01 - EP KR); **B32B 27/302** (2013.01 - EP KR); **B32B 37/06** (2013.01 - KR); **B32B 37/08** (2013.01 - KR); **C08K 7/02** (2013.01 - KR); **C08L 25/12** (2013.01 - KR); **C08L 101/00** (2013.01 - KR); **B29K 2025/08** (2013.01 - US); **B29K 2311/10** (2013.01 - US); **B29K 2995/0022** (2013.01 - US); **B29K 2995/0026** (2013.01 - US); **B29K 2995/0063** (2013.01 - US); **B29K 2995/0097** (2013.01 - US); **B29L 2031/10** (2013.01 - US); **B32B 2250/02** (2013.01 - EP); **B32B 2250/03** (2013.01 - EP); **B32B 2250/04** (2013.01 - EP); **B32B 2250/05** (2013.01 - EP); **B32B 2250/40** (2013.01 - EP); **B32B 2250/42** (2013.01 - EP); **B32B 2260/021** (2013.01 - EP); **B32B 2260/023** (2013.01 - EP); **B32B 2260/046** (2013.01 - EP); **B32B 2262/06** (2013.01 - EP); **B32B 2262/062** (2013.01 - EP); **B32B 2262/065** (2013.01 - EP KR); **B32B 2262/08** (2013.01 - EP); **B32B 2270/00** (2013.01 - EP); **B32B 2307/406** (2013.01 - EP); **B32B 2307/412** (2013.01 - EP); **B32B 2307/718** (2013.01 - EP); **B32B 2307/738** (2013.01 - EP); **B32B 2437/00** (2013.01 - EP); **B32B 2439/00** (2013.01 - EP); **B32B 2451/00** (2013.01 - EP)

Citation (search report)  
See references of WO 2022180018A1

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 2022180018 A1 20220901**; AU 2022226373 A1 20230824; CA 3208023 A1 20220901; CN 116847982 A 20231003; EP 4297970 A1 20240103; JP 2024506982 A 20240215; KR 20230152041 A 20231102; US 2024131806 A1 20240425; US 2024227319 A9 20240711

DOCDB simple family (application)  
**EP 2022054357 W 20220222**; AU 2022226373 A 20220222; CA 3208023 A 20220222; CN 202280015932 A 20220222; EP 22707136 A 20220222; JP 2023550564 A 20220222; KR 20237030430 A 20220222; US 202218547087 A 20220222