

Title (en)
NAPPED ARTIFICIAL LEATHER AND COMPOSITE MATERIAL

Title (de)
AUFGERAUTES KUNSTLEDER UND VERBUNDMATERIAL

Title (fr)
CUIR ARTIFICIEL DUVETEUX ET MATIÈRE COMPOSITE

Publication
EP 3904592 A4 20221012 (EN)

Application
EP 19906447 A 20191128

Priority
• JP 2018246738 A 20181228
• JP 2018246739 A 20181228
• JP 2019046648 W 20191128

Abstract (en)
[origin: EP3904592A1] Disclosed is a napped artificial leather including: a fiber-entangled body including ultrafine fibers having a fineness of 0.5 dtex or less; and an elastic polymer impregnated into the fiber-entangled body, the napped artificial leather having a thickness of 0.25 to 1.5 mm, and including a main surface that is a napped surface formed by napping the ultrafine fibers. The napped artificial leather further includes phosphorous-based flame retardant particles attached to the elastic polymer such as a polyurethane, the phosphorous-based flame retardant particles being locally present in a range of a thickness of 200 μm or less from a back surface opposite to the main surface. The phosphorous-based flame retardant particles have an average particle size of 0.1 to 30 μm, a phosphorus atom content of 14 mass% or more, and a solubility in water at 30 °C of 0.2 mass% or less, and a melting point, or, in the absence of a melting point, a decomposition temperature, of 150 °C or more, and a content ratio of the phosphorous-based flame retardant particles is 1 to 6 mass% as a content ratio in terms of phosphorus atoms.

IPC 8 full level
D06N 3/14 (2006.01); **D06M 11/00** (2006.01); **D06M 13/285** (2006.01); **D06M 15/564** (2006.01); **D06N 3/00** (2006.01)

CPC (source: EP KR US)
D06M 11/00 (2013.01 - KR); **D06M 13/285** (2013.01 - KR); **D06M 15/564** (2013.01 - KR); **D06N 3/0004** (2013.01 - EP US); **D06N 3/0011** (2013.01 - US); **D06N 3/0059** (2013.01 - EP KR US); **D06N 3/0063** (2013.01 - US); **D06N 3/0075** (2013.01 - EP KR US); **D06N 3/14** (2013.01 - KR); **D06N 3/146** (2013.01 - EP US); **D06N 3/147** (2013.01 - US); **D06M 2200/30** (2013.01 - KR); **D06N 2209/067** (2013.01 - EP KR US); **D06N 2211/28** (2013.01 - US)

Citation (search report)
• [I] JP 2008081916 A 20080410 - KURARAY CO, et al
• [A] WO 2017195661 A1 20171116 - KURARAY CO [JP]
• [A] JP 2016044375 A 20160404 - KURARAY CO
• [A] JP 2012229508 A 20121122 - DAIKYO CHEMICAL, et al
• See references of WO 2020137346A1

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

DOCDB simple family (publication)
EP 3904592 A1 20211103; **EP 3904592 A4 20221012**; CN 113260760 A 20210813; CN 113260760 B 20240301; KR 20210094070 A 20210728; TW 202039959 A 20201101; TW I828830 B 20240111; US 2022074133 A1 20220310; WO 2020137346 A1 20200702

DOCDB simple family (application)
EP 19906447 A 20191128; CN 201980085895 A 20191128; JP 2019046648 W 20191128; KR 20217020336 A 20191128; TW 108147520 A 20191225; US 201917415877 A 20191128