

Title (en)

BIODEGRADABLE ABSORBENT MATERIAL AND METHOD OF MANUFACTURE

Title (de)

BIOLOGISCH ABBAUBARES, SAUGFÄHIGES MATERIAL UND VERFAHREN ZUR HERSTELLUNG

Title (fr)

MATÉRIAU ABSORBANT BIODÉGRADABLE ET PROCÉDÉ DE FABRICATION

Publication

**EP 3362486 A4 20190918 (EN)**

Application

**EP 16856163 A 20161013**

Priority

- US 201514884172 A 20151015
- US 2016056779 W 20161013

Abstract (en)

[origin: WO2017066408A1] Biodegradable graft copolymers derived from a carbohydrate, including nitrogen- containing carbohydrates and modified carbohydrates, and at least one  $\alpha,\beta$ -unsaturated carboxylic acid derivative having superabsorbent properties are disclosed in addition to the substantially adiabatic polymerization process by which the graft copolymers are made. The methods disclosed can be carried out in a variety of currently available stirred and/or continuous commercial reactors. Polymerizations carried out with starch have surprisingly produced substantially quantitative yields of graft copolymer free of residual monomer produced as a moist copolymer. Product work-up typically involves an optional neutralization and drying.

IPC 8 full level

**C08B 31/00** (2006.01); **C08F 251/00** (2006.01); **C08F 251/02** (2006.01)

CPC (source: EP)

**C08B 31/00** (2013.01); **C08B 31/003** (2013.01); **C08B 37/003** (2013.01); **C08F 251/02** (2013.01)

Citation (search report)

- [A] US 2013303714 A1 20131114 - CHAMBERS WILLIAM J [US]
- [A] WO 9401476 A1 19940120 - STOCKHAUSEN CHEM FAB GMBH [DE], et al
- See references of WO 2017066408A1

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)

**WO 2017066408 A1 20170420**; AU 2016340267 A1 20180531; AU 2016340267 B2 20210701; CA 3002058 A1 20170420; EP 3362486 A1 20180822; EP 3362486 A4 20190918; ZA 201803175 B 20190227

DOCDB simple family (application)

**US 2016056779 W 20161013**; AU 2016340267 A 20161013; CA 3002058 A 20161013; EP 16856163 A 20161013; ZA 201803175 A 20180514