

Title (en)

BIODEGRADABLE SHAPED ARTICLE CONTAINING A CORROSION INHIBITOR AND INERT FILLER PARTICLES

Title (de)

BIOLOGISCH ABBAUBARER FORMKÖRPER, ENTHALTEND EINEN KORROSIONSINHIBITOR UND INERTE FÜLLSTOFFTEILCHEN

Title (fr)

ARTICLE FORME BIODEGRADABLE CONTENANT UN INHIBITEUR DE LA CORROSION ET DES PARTICULES DE CHARGE INERTES

Publication

**EP 1606432 A1 20051221 (EN)**

Application

**EP 04758177 A 20040320**

Priority

- US 2004008694 W 20040320
- US 39606703 A 20030325
- US 45330403 A 20030603
- US 80513704 A 20040320

Abstract (en)

[origin: KR20060010731A] A shaped article comprising a biodegradable polymer ("biopolymer) filled with more than 5 wt%, and up to about 35 wt% of an inert particulate filler so as to have a WVTR in the range from at least twice to about 50 times greater than that of low density PE having a melt flow index of 1 g/10 min, each of the same thickness, is more effective to protect metal parts against corrosion than "neat" or unfilled biopolymer. Moreover a cross-section of the filled biopolymer 0.025 mm thick, is substantially transparent if the neat biopolymer is transparent. The improvement in corrosion protection is obtained without decreasing the tensile strength of the film below a critical tensile strength of 2000 psi in either the machine or transverse direction, preferably in both directions, due to the uniformity of the dispersed particles in the filled biopolymer. Such uniformity is obtained because the ingredients in the biopolymer are essentially anhydrous.

IPC 1-7

**C23F 11/02**; **C08K 3/00**; **C08L 67/02**; **C08L 67/04**; **C08L 77/12**; **C08K 3/22**; **C08K 3/36**

IPC 8 full level

**C08K 3/00** (2006.01); **C08K 3/22** (2006.01); **C08K 3/36** (2006.01); **C08L 67/02** (2006.01); **C08L 67/04** (2006.01); **C08L 77/12** (2006.01); **C23F 11/02** (2006.01)

CPC (source: KR)

**C08K 3/22** (2013.01); **C08K 3/36** (2013.01); **C08L 67/02** (2013.01); **C08L 77/12** (2013.01)

Citation (search report)

See references of WO 2004087995A1

Cited by

CN109265935A

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

BR PI0408765 A 20060328; EP 1606432 A1 20051221; JP 2006521471 A 20060921; KR 20060010731 A 20060202

DOCDB simple family (application)

BR PI0408765 A 20040320; EP 04758177 A 20040320; JP 2006507447 A 20040320; KR 20057017994 A 20050924