

Title (en)

PROCESS FOR PREPARING METAL DETERGENTS

Title (de)

VERFAHREN ZUR HERSTELLUNG METALLDETERGENTEN

Title (fr)

PROCÉDÉ À PRÉPARER DES DÉTERGENTS DE MÉTAUX

Publication

EP 3199612 A1 20170802 (EN)

Application

EP 16206178 A 20161222

Priority

- US 201615006219 A 20160126
- EP 16155672 A 20160215

Abstract (en)

Sulfurised calcium phenate detergents having a reduced unsulfurised alkyl-substituted phenol content are made by: (A) providing, made from an unsulfurised alkyl-substituted phenol, a sulfurised calcium phenate detergent that, optionally, may have been further reacted with carbon dioxide; (B) adding to the detergent from 1 to 100 mass % , based on the mass of the detergent, of an organic solvent that has a boiling point of above 100°C and below the boiling point of the unsulfurised alkyl-substituted phenol; and (C) removing the organic solvent from the detergent thereby to reduce the unsulfurised alkyl-substituted phenol content.

IPC 8 full level

C10M 135/30 (2006.01); **C10M 159/22** (2006.01); **C10M 169/04** (2006.01); **C10M 177/00** (2006.01); **C10N 10/04** (2006.01); **C10N 40/25** (2006.01)

CPC (source: CN EP KR)

C10M 125/06 (2013.01 - KR); **C10M 135/02** (2013.01 - CN); **C10M 159/22** (2013.01 - EP); **C10M 169/04** (2013.01 - KR); **C10M 177/00** (2013.01 - EP); **C10M 2203/00** (2013.01 - EP); **C10M 2207/021** (2013.01 - EP); **C10M 2207/027** (2013.01 - EP); **C10M 2207/028** (2013.01 - EP); **C10M 2219/02** (2013.01 - CN); **C10M 2219/088** (2013.01 - EP); **C10M 2219/089** (2013.01 - EP); **C10N 2010/04** (2013.01 - EP); **C10N 2030/02** (2013.01 - EP); **C10N 2030/04** (2013.01 - CN KR); **C10N 2030/52** (2020.05 - EP); **C10N 2040/25** (2013.01 - EP KR); **C10N 2040/252** (2020.05 - EP); **C10N 2050/10** (2013.01 - EP); **C10N 2070/00** (2013.01 - EP)

Citation (applicant)

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- WO 2015153160 A1 20151008 - LUBRIZOL CORP [US]
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Citation (search report)

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Citation (third parties)

Third party : J A Kemp LLP /Kieron Grehan/

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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

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