

Title (en)  
METAL CLEANER CONTAINING POLYETHYLENIMINE

Title (de)  
METALLREINIGER MIT POLYETHYLENIMIN

Title (fr)  
PRODUIT NETTOYANT POUR METAUX CONTENANT UN POLYETHYLENE IMINE

Publication  
**EP 1817398 B1 20120201 (DE)**

Application  
**EP 05792155 A 20050910**

Priority  
• EP 2005009768 W 20050910  
• DE 102004057623 A 20041129

Abstract (en)  
[origin: US2007270323A1] A process for cleaning metal surfaces is provided using a neutral industrial cleaner, which comprises a combination of non-ionic surfactants and/or glycol ethers, and polyethylene imine. The cleaner has a demulsifying effect on fats and/or oils on metal surfaces and in the cleaning solution allowing separation and reuse of the cleaner. The cleaner is low-foaming and can advantageously be used in spray application.

IPC 8 full level  
**C11D 1/62** (2006.01); **C11D 3/37** (2006.01); **C23G 1/06** (2006.01); **C23G 1/18** (2006.01); **C23G 1/26** (2006.01)

CPC (source: EP US)  
**C11D 1/62** (2013.01 - EP US); **C11D 1/835** (2013.01 - EP US); **C11D 3/2068** (2013.01 - EP US); **C11D 3/3723** (2013.01 - EP US); **C11D 3/43** (2013.01 - EP US); **C23G 1/061** (2013.01 - EP US); **C23G 1/18** (2013.01 - EP US); **C23G 1/26** (2013.01 - EP US); **C11D 1/72** (2013.01 - EP US); **C11D 2111/16** (2024.01 - EP US)

Cited by  
WO2016135000A1; US10907259B2

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**US 2007270323 A1 20071122**; AT E543895 T1 20120215; DE 102004057623 A1 20060601; EP 1817398 A1 20070815; EP 1817398 B1 20120201; WO 2006058570 A1 20060608

DOCDB simple family (application)  
**US 75390307 A 20070525**; AT 05792155 T 20050910; DE 102004057623 A 20041129; EP 05792155 A 20050910; EP 2005009768 W 20050910