

Title (en)
INSECTICIDAL AND/OR HERBICIDAL COMPOSITION HAVING IMPROVED ACTIVITY ON THE BASIS OF SPIRO-HETEROCYCLICALLY
SUBSTITUTED TETRAMIC ACID DERIVATIVES

Title (de)
INSEKTIZIDE UND/ODER HERBIZIDE ZUSAMMENSETZUNG MIT VERBESSERTER WIRKUNG AUF BASIS VON SPIROHETEROCYCLISCH-
SUBSTITUIERTEN TETRAMSÄURE-DERIVATEN

Title (fr)
COMPOSITION INSECTICIDE ET/OU HERBICIDE À ACTION AMÉLIORÉE, À BASE DE DÉRIVÉS D'ACIDE TÉTRAMIQUE À SUBSTITUANTS
SPIROHÉTÉROCYCLIQUES

Publication
EP 2560487 A1 20130227 (DE)

Application
EP 11716228 A 20110418

Priority
• US 32589310 P 20100420
• EP 10160451 A 20100420
• EP 2011056136 W 20110418
• EP 11716228 A 20110418

Abstract (en)
[origin: WO2011131623A1] The invention relates to an increase in the activity of crop protection products, containing in particular spiro-
heterocyclically substituted tetramic acid derivatives of formula (I), by adding ammonium salts or phosphonium salts and optionally penetration
promoters, to the corresponding products, to methods for producing same and to the use thereof in crop protection as insecticides and/or acaricides
and/or to prevent undesirable plant growth.

IPC 8 full level
A01N 43/36 (2006.01); **A01N 33/12** (2006.01); **A01N 43/40** (2006.01); **A01N 43/90** (2006.01); **A01N 57/20** (2006.01); **A01P 7/02** (2006.01);
A01P 7/04 (2006.01); **A01P 13/00** (2006.01)

CPC (source: EP US)
A01N 33/12 (2013.01 - EP US); **A01N 43/90** (2013.01 - EP US)

Citation (search report)
See references of WO 2011131623A1

Citation (examination)
"Foye's Principles of Medicinal Chemistry, 6th Edition", 1 January 2008, LIPPINCOTT WILLIAMS & WILKINS, A WOLTERS KLUWER BUSINESS,
ISBN: 978-0-78-176879-5, article "Chapter 2 / Drug Design and Relationship of functional groups to pharmacologic activity", pages: 49 - 51,
XP055075458

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 2011131623 A1 20111027; BR 112012027044 A2 20150929; BR 112012027044 A8 20171010; CN 102939007 A 20130220;
CN 102939007 B 20150902; EP 2560487 A1 20130227; US 2011281727 A1 20111117; US 8889592 B2 20141118

DOCDB simple family (application)
EP 2011056136 W 20110418; BR 112012027044 A 20110418; CN 201180030299 A 20110418; EP 11716228 A 20110418;
US 201113090759 A 20110420