

Title (en)
BISMUTH-THIOLS AS ANTISEPTICS FOR AGRICULTURAL, INDUSTRIAL AND OTHER USES

Title (de)
WISMUT-THIOLE ALS ANTISEPTIKA FÜR LANDWIRTSCHAFTLICHE, INDUSTRIELLE UND ANDERE ZWECKE

Title (fr)
BISMUTH-THIOLS UTILISABLES COMME ANTISEPTIQUES EN AGRICULTURE, DANS L'INDUSTRIE ET DANS D'AUTRES DOMAINES

Publication
EP 2603083 A4 20141022 (EN)

Application
EP 11817067 A 20110811

Priority

- US 2011023549 W 20110203
- US 37318810 P 20100812
- US 2011047490 W 20110811

Abstract (en)
[origin: WO2012021754A2] Compositions and methods, including novel homogeneous microparticulate suspensions, are described for treating natural and artificial surfaces that contain bacterial biofilm, including unexpected synergy or enhancing effects between bismuth-thiol (BT) compounds and certain antibiotics, to provide formulations including antiseptic formulations. Previously unpredicted antibacterial properties and anti-biofilm properties of disclosed BT compounds and BT compound-plus-antibiotic combinations are also described, including preferential efficacies of certain such compositions for treating certain gram-positive bacterial infections, and distinct preferential efficacies of certain such compositions for treating certain gram-negative bacterial infections.

IPC 8 full level
A01N 55/02 (2006.01); **A01P 1/00** (2006.01)

CPC (source: CN EP KR)
A01N 43/82 (2013.01 - EP); **A01N 55/02** (2013.01 - CN); **A61K 9/0014** (2013.01 - EP); **A61K 9/0019** (2013.01 - KR); **A61K 9/0043** (2013.01 - KR); **A61K 9/0048** (2013.01 - KR); **A61K 9/0053** (2013.01 - KR); **A61K 9/0073** (2013.01 - KR); **A61K 9/145** (2013.01 - EP); **A61K 9/70** (2013.01 - KR); **A61K 31/29** (2013.01 - EP KR); **A61K 31/7042** (2013.01 - KR); **A61K 33/245** (2013.01 - EP); **A61P 1/02** (2018.01 - EP); **A61P 17/00** (2018.01 - EP); **A61P 31/04** (2018.01 - EP); **A61P 31/10** (2018.01 - EP); **A61P 31/12** (2018.01 - EP); **A61P 43/00** (2018.01 - EP); **Y02A 50/30** (2018.01 - EP); **Y02P 20/54** (2015.11 - EP)

C-Set (source: CN EP)
CN
A01N 55/02 + A01N 25/04 + A01N 25/12
EP
A01N 43/82 + A01N 25/04 + A01N 25/12

Citation (search report)

- [Y] US 5928671 A 19990727 - DOMENICO PHILIP [US]
- [Y] US 2002197282 A1 20021226 - MOHSENI SAEED H [US], et al
- [Y] WO 2008092011 A2 20080731 - COOK INC [US], et al
- [Y] US 6086921 A 20000711 - DOMENICO PHILIP [US]
- [Y] AU 2003204105 B2 20051117 - WINTHROP UNIV HOSPITAL [US]
- [Y] US 2008292673 A1 20081127 - CRUDDEN JOSEPH J [US]
- [Y] US 2002136780 A1 20020926 - BATARSEH KAREEM I [US]
- [Y] US 2809971 A 19571015 - JACK BERNSTEIN, et al
- [Y] DOMENICO P ET AL: "Enhancement of Bismuth Antibacterila Activity with Lipophilic Thiol Chelators", ANTIMICROBIAL AGENTS AND CHEMOTHERAPY, AMERICAN SOCIETY FOR MICROBIOLOGY, US, vol. 41, no. 8, 1 August 1997 (1997-08-01), pages 1697 - 1703, XP002262341, ISSN: 0066-4804
- [Y] WILFREDO G VELOIRA ET AL: "In vitro activity and synergy of bismuth thiols and tobramycin against Burkholderia Cpacia complex", JOURNAL OF ANTIMICROBIAL CHEMOTHERAPY, OXFORD UNIVERSITY PRESS, GB, vol. 52, no. 6, 1 December 2003 (2003-12-01), pages 915 - 919, XP008154593, ISSN: 0305-7453, [retrieved on 20031029], DOI: 10.1093/JAC/DKG471
- [Y] LEE ET AL: "Inhibition of methicillin-resistant Staphylococcus aureus biofilm formation with bismuth-thiol compounds", ABSTRACTS OF THE GENERAL MEETING OF THE AMERICAN SOCIETY FOR MICROBIOLOGY, THE SOCIETY WASHINGTON, DC, US, vol. 104, 1 January 2004 (2004-01-01), pages 111, XP009160853
- [Y] DATABASE WPI Derwent World Patents Index; AN 2004-369133, XP002728841
- See also references of WO 2012021754A2

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 2012021754 A2 20120216; WO 2012021754 A3 20120524; AU 2011289338 A1 20130328; AU 2011289338 B2 20150122; AU 2016203475 A1 20160616; AU 2018204190 A1 20180705; AU 2018204190 B2 20200723; BR 112012019286 A2 20180626; BR 112013003127 A2 20160628; CA 2807993 A1 20120216; CA 2807993 C 20230314; CL 2013000430 A1 20131004; CL 2017002549 A1 20180511; CN 103096720 A 20130508; CN 103096720 B 20160330; CN 105766990 A 20160720; CN 105766990 B 20190802; EP 2603083 A2 20130619; EP 2603083 A4 20141022; IL 224684 A 20161130; IL 248446 B 20180531; IL 258908 A 20180628; JP 2013535506 A 20130912; JP 2016117741 A 20160630; JP 2018008971 A 20180118; JP 2018076358 A 20180517; JP 2020055839 A 20200409; JP 2020063277 A 20200423; JP 2022003090 A 20220111; JP 6272366 B2 20180131; JP 6685991 B2 20200422; JP 7097344 B2 20220707; KR 101821833 B1 20180125; KR 101966867 B1 20190408; KR 102074444 B1 20200206; KR 20130000386 A 20130102; KR 20130132410 A 20131204; KR 20170136009 A 20171208; KR 20180085042 A 20180725; KR 20190039607 A 20190412; KR 20200015814 A 20200212; MX 2013001581 A 20130320; MX 2019001293 A 20190704; MX 2019010863 A 20191105; MX 362785 B 20190212; MX 371047 B 20200114; NZ 606634 A 20150130; PH 12016502498 A1 20180611; RU 2013110493 A 20140920; RU 2018108411 A 20190225; SG 10201506131R A 20150929; SG 10202001032R A 20200429; SG 187801 A1 20130328; UA 113616 C2 20170227

DOCDB simple family (application)

US 2011047490 W 20110811; AU 2011289338 A 20110811; AU 2016203475 A 20160526; AU 2018204190 A 20180613;
BR 112012019286 A 20110203; BR 112013003127 A 20110811; CA 2807993 A 20110811; CL 2013000430 A 20130212;
CL 2017002549 A 20171010; CN 201180042863 A 20110811; CN 201610127111 A 20110811; EP 11817067 A 20110811;
IL 22468413 A 20130212; IL 24844616 A 20161021; IL 25890818 A 20180424; JP 2013524237 A 20110811; JP 2016003005 A 20160108;
JP 2017141774 A 20170721; JP 2017253007 A 20171228; JP 2019219070 A 20191203; JP 2019225544 A 20191213;
JP 2021166416 A 20211008; KR 20127022562 A 20110203; KR 20137006121 A 20110811; KR 20177034637 A 20110203;
KR 20187019857 A 20110811; KR 20197009488 A 20110203; KR 20207003093 A 20110203; MX 2013001581 A 20110811;
MX 2016010269 A 20110203; MX 2019001293 A 20130208; MX 2019010863 A 20120803; NZ 60663411 A 20110811;
PH 12016502498 A 20161214; RU 2013110493 A 20110811; RU 2018108411 A 20110811; SG 10201506131R A 20110811;
SG 10202001032R A 20110811; SG 2013010053 A 20110811; UA A201303059 A 20110811