

Title (en)
METHOD FOR REMOVING CRUSTACEAN ECTOPARASITES FROM FARMED SALMONID FISH USING WATER-SOLUBLE TETRAPYRROLE COMPOUNDS AND LIGHT

Title (de)
VERFAHREN ZUR ENTFERNUNG VON KRUSTENTIEREKTOPARASITEN AUS ZUCHTLACHSENFISCHEN UNTER VERWENDUNG VON WASSERLÖSLICHEN TETRAPYRROLVERBINDUNGEN UND LICHT

Title (fr)
PROCÉDÉ D'ÉLIMINATION DE CRUSTACÉS ECTOPARASITES DE SALMONIDÉS D'ÉLEVAGE À L'AIDE DE COMPOSÉS DE TÉTRAPYRROLE HYDROSOLUBLES ET DE LUMIÈRE

Publication
EP 4167729 A4 20240626 (EN)

Application
EP 21825236 A 20210616

Priority
• NO 20200710 A 20200617
• NO 2021050146 W 20210616

Abstract (en)
[origin: WO2021256938A1] Composition in the form of an aqueous solution comprising a chemical compound for use in a method of therapy using artificial light for an external crustacean parasite infection in salmonid fish, said external crustacean parasite infection comprises an infection of salmon lice, *Lepeophtheirus salmonis*, *Caligus rogercresseyi* and *Caligus* spp. Said chemical compound is a water-soluble tetrapyrrole compound or a pharma-ceutical acceptable derivative thereof, with the proviso that the water-soluble tetrapyrrole is not chlorophyllin. Said water-soluble tetrapyrrole compound is administered in a bath treatment of the salmonid fish in need of such treatment, and the salmon lice is illuminated by artificial light.

IPC 8 full level
A01K 61/13 (2017.01); **A01N 25/00** (2006.01); **A01N 43/36** (2006.01); **A01N 43/38** (2006.01); **A01N 43/90** (2006.01); **A01N 59/20** (2006.01); **A01P 7/00** (2006.01); **A61K 41/00** (2020.01); **A61K 47/69** (2017.01)

CPC (source: EP NO)
A01K 61/13 (2017.01 - NO); **A01K 63/04** (2013.01 - NO); **A01N 43/90** (2013.01 - EP NO); **A01N 59/20** (2013.01 - EP); **A01P 7/00** (2021.08 - EP); **A61K 41/0071** (2013.01 - EP NO); **A61K 47/6951** (2017.08 - EP); **Y02A 40/81** (2018.01 - EP)

C-Set (source: EP)
1. **A01N 43/90 + A01N 25/02 + A01N 25/12 + A01N 25/30 + A01N 59/20**
2. **A01N 59/20 + A01N 25/02 + A01N 25/12 + A01N 25/30**

Citation (search report)
• [XP] WO 202130843 A1 20200625 - MOWI ASA [NO]
• [Y] ROBERTSON P K J ET AL: "A new generation of biocides for control of crustacea in fish farms", JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY B: BIOLOGY, ELSEVIER SCIENCE S.A., BASEL, CH, vol. 95, no. 1, 2 April 2009 (2009-04-02), pages 58 - 63, XP025981403, ISSN: 1011-1344, [retrieved on 20090314], DOI: 10.1016/J.JPHOTOBIO.2008.12.009
• [Y] HÄDER D-P ET AL: "Fighting fish parasites with photodynamically active chlorophyllin", PARASITOLOGY RESEARCH, SPRINGER BERLIN HEIDELBERG, BERLIN/HEIDELBERG, vol. 115, no. 6, 3 March 2016 (2016-03-03), pages 2277 - 2283, XP035881993, ISSN: 0932-0113, [retrieved on 20160303], DOI: 10.1007/S00436-016-4972-Y
• [Y] ADELAIDE ALMEIDA ET AL: "Phage Therapy and Photodynamic Therapy: Low Environmental Impact Approaches to Inactivate Microorganisms in Fish Farming Plants", MARINE DRUGS, MOLECULAR DIVERSITY PRESERVATION INTERNATIONAL, BASEL, CH, vol. 7, no. 3, 1 September 2009 (2009-09-01), pages 268 - 313, XP002622140, ISSN: 1660-3397, [retrieved on 20090630], DOI: 10.3390/MD7030268
• [Y] ELIANA ALVES ET AL: "Potential applications of porphyrins in photodynamic inactivation beyond the medical scope", JOURNAL OF PHOTOCHEMISTRY, vol. 22, 1 March 2015 (2015-03-01), AMSTERDAM, NL, pages 34 - 57, XP055425775, ISSN: 1389-5567, DOI: 10.1016/j.jphotochemrev.2014.09.003
• [Y] SEMERARO PAOLA ET AL: "Chlorophyllin cyclodextrin supramolecular complexes as a natural photosensitizer for photodynamic therapy (PDT) applications", MATERIALS SCIENCE AND ENGINEERING C, ELSEVIER SCIENCE S.A, CH, vol. 85, 15 December 2017 (2017-12-15), pages 47 - 56, XP085415459, ISSN: 0928-4931, DOI: 10.1016/J.MSEC.2017.12.012
• See also references of WO 2021256938A1

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 2021256938 A1 20211223; CA 3181123 A1 20211223; CL 2022003628 A1 20230623; DK 202270639 A1 20230106; EP 4167729 A1 20230426; EP 4167729 A4 20240626; NO 20210775 A1 20211220; NO 347612 B1 20240129

DOCDB simple family (application)
NO 2021050146 W 20210616; CA 3181123 A 20210616; CL 2022003628 A 20221216; DK PA202270639 A 20210616; EP 21825236 A 20210616; NO 20210775 A 20210616