

Title (en)
LACTAM COMPOSITION AND USE

Title (de)
LACTAMZUSAMMENSETZUNG UND VERWENDUNG

Title (fr)
COMPOSITION DE LACTAME ET UTILISATION

Publication
EP 4258876 A1 20231018 (EN)

Application
EP 21802746 A 20211105

Priority
• EP 20212786 A 20201209
• EP 2021080764 W 20211105

Abstract (en)
[origin: WO2022122263A1] The invention relates to a composition comprising: (a) from 0.0001 to 5 wt.% of a lactam; (b) 0.5 to 95 wt.% of a solvent; and, (c) from 0.1 to 80 wt.%, of a film-forming polymer; wherein the film-forming polymer is selected from polysaccharides, quaternised polysaccharide derivatives, polyvinylpyrrolidone (PVP) and co-polymers thereof, and, polyvinylalcohol (PVA) and co-polymers of polyvinylalcohol, and/or mixtures thereof; and, wherein the lactam is of formula (I) or (II), wherein: R1 and R2 are each independently selected from hydrogen, halogen, alkyl, cycloalkyl, alkoxy, oxoalkyl, alkenyl, heterocyclyl, heteroaryl, aryl and aralalkyl; and R3 is selected from hydrogen, hydroxyl, alkyl, cycloalkyl, alkoxy, oxoalkyl, alkenyl, heterocyclyl, heteroaryl, cycloalkyl, aryl, aralalkyl, $-C(O)CR_6=CH_2$, and $(CH_2)_nN+(Ra)_3$, where n is an integer from 1 to 16, and where each Ra is independently H or C1-4 alkyl; R4 and R5 are independently selected from hydrogen, aryl, heterocyclyl, heteroaryl, and arylalkyl; and R6 is selected from hydrogen and methyl; and R7 is selected from hydrogen and $-C(O)CR_6=CH_2$; the invention also relates to a method of treatment of a surface, to improve resistance of said surface to bacterial fouling; and also to the use of a combination of a lactam and a film forming polymer as defined earlier to improve inhibition of bacterial species.

IPC 8 full level
A01N 43/36 (2006.01); **A01N 25/02** (2006.01); **A01N 25/34** (2006.01); **A01P 1/00** (2006.01)

CPC (source: EP)
A01N 25/02 (2013.01); **A01N 25/34** (2013.01); **A01N 43/36** (2013.01); **A01P 1/00** (2021.08)

C-Set (source: EP)
1. **A01N 25/34 + A01N 43/36**
2. **A01N 25/02 + A01N 43/36**

Citation (search report)
See references of WO 2022122263A1

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

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
WO 2022122263 A1 20220616; CN 116583180 A 20230811; EP 4258876 A1 20231018

DOCDB simple family (application)
EP 2021080764 W 20211105; CN 202180078051 A 20211105; EP 21802746 A 20211105