

Title (en)
COMPOSITION AND METHOD FOR USE OF 1-ALKYL-5-OXOPYRROLIDINE-3-CARBOXYLIC ACIDS AS COLLECTORS FOR PHOSPHATE AND LITHIUM FLOTATION

Title (de)
ZUSAMMENSETZUNG UND VERFAHREN ZUR VERWENDUNG VON 1-ALKYL-5-OXOPYRROLIDIN-3-CARBONSÄUREN ALS SAMMLER FÜR DIE PHOSPHAT- UND LITHIUMFLOTATION

Title (fr)
COMPOSITION ET PROCÉDÉ D'UTILISATION D'ACIDES 1-ALKYL-5-OXOPYRROLIDINE-3-CARBOXYLIQUES COMME COLLECTEURS POUR LA FLOTTATION DE PHOSPHATE ET DE LITHIUM

Publication
EP 4399029 A1 20240717 (EN)

Application
EP 22750814 A 20220713

Priority
• US 202117470795 A 20210909
• EP 21199322 A 20210928
• EP 2022069546 W 20220713

Abstract (en)
[origin: WO2023036498A1] The invention relates to a flotation agent for lithium or phosphate ore, comprising at least one fatty acid and at least one 1-alkyl-5-oxopyrrolidine-3-carboxylic acid or 1-alkenyl-5-oxopyrrolidine-3-carboxylic acid or a mixture thereof of the formula (1) wherein R is a C7 to C21 alkyl or alkenyl group, wherein the amount of fatty acid is from 70 to 99 wt.-%, and wherein the amount of the 1-alkyl-5-oxopyrrolidine-3-carboxylic acid or 1-alkenyl-5-oxopyrrolidine-3-carboxylic acid of the formula (I) is from 1 to 30 wt.-%.

IPC 8 full level
B03D 1/00 (2006.01); **B03D 1/008** (2006.01); **B03D 1/01** (2006.01); **B03D 1/02** (2006.01)

CPC (source: EP)
B03D 1/008 (2013.01); **B03D 1/01** (2013.01); **B03D 1/02** (2013.01); **B03D 1/021** (2013.01); **B03D 2201/02** (2013.01); **B03D 2203/04** (2013.01); **B03D 2203/06** (2013.01)

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 2023036498 A1 20230316; AR 126575 A1 20231025; AU 2022342271 A1 20240502; CA 3232104 A1 20230316; CL 2024000691 A1 20240726; EP 4399029 A1 20240717; PE 20240543 A1 20240319

DOCDB simple family (application)
EP 2022069546 W 20220713; AR P220101981 A 20220726; AU 2022342271 A 20220713; CA 3232104 A 20220713; CL 2024000691 A 20240307; EP 22750814 A 20220713; PE 2024000169 A 20220713