

Title (en)

METHOD FOR THE PRODUCTION OF AN AQUEOUS ACRYLAMIDE SOLUTION WITH A BIO-CATALYST

Title (de)

VERFAHREN ZUR HERSTELLUNG EINER WÄSSRIGEN ACRYLAMIDLÖSUNG MIT EINEM BIOKATALYSATOR

Title (fr)

PROCEDE POUR PREPARER UNE SOLUTION D'ACRYLAMIDE AVEC UN BIOCATALYSEUR

Publication

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Application

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Abstract (en)

[origin: WO02088371A2] The invention relates to a method and a device for the production of an aqueous acrylamide solution by hydration of acrylonitrile in an aqueous solution in the presence of a bio-catalyst.

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Citation (search report)

See references of WO 02088371A2

Citation (third parties)

Third party :

- DE 4480132 C2 19970313 - GNI SKIJ I GENETIKI I SELEKCIJ [RU]
- EP 0188316 B1 19931027 - NITTO CHEMICAL INDUSTRY CO LTD [JP]
- US 5334519 A 19940802 - YAMADA HIDEAKI [JP], et al
- DATABASE HCAPLUS [online] BILLEDEAU S.M. ET AL.: "GC-FTIR analysis of acrylamide and acrylic acid in microbial extracts", XP002989212, accession no. STN Database accession no. 1997:485821 & "Book of abstracts, 214th ACS national meeting, Las Vegas", 1997, USA
- BERNET N; ET AL: "BIOCONVERSION OF ACRYLONITRILE INTO ACRYLAMIDE USING A HIGHLY COMPACT MULTIPHASIC REACTOR", THE CHEMICAL ENGINEERING J., vol. 46, 1991, pages B43 - B51, XP001091361
- COLEMAN M.M. ET AL.: "Studies of the degradation of acrylonitrile/acrylamide copolymers as a function of composition and temperature", CARBON, vol. 21, no. 3, 1983, pages 255 - 267, XP002989213
- GRASSL B. ET AL.: "Online monitoring of chain transfer in free-radical polymerization", MACROMOL. CHEM. PHYS., vol. 202, 2001, pages 2518 - 2524, XP002989214
- MICHAEL R. DADD ET AL: "Real-time monitoring of nitrile biotransformations by mid-infrared spectroscopy", JOURNAL OF MICROBIOLOGICAL METHODS, vol. 41, 2000, pages 69 - 75, XP002993569

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