

Title (en)
SMART TEMPERATURE-SENSITIVE HYDROGELS WITH ANTIFUNGAL PROPERTY THAT PERFORM CONTROLLED DRUG RELEASE

Title (de)
INTELLIGENTE TEMPERATUREMPFINDLICHE HYDROGELE MIT FUNGIZIDER EIGENSCHAFT, DIE EINE KONTROLLIERTE WIRKSTOFFFREISETZUNG DURCHFÜHREN

Title (fr)
HYDROGELS INTELLIGENTS SENSIBLES À LA TEMPÉRATURE À PROPRIÉTÉ ANTIFONGIQUE RÉALISANT UNE LIBÉRATION CONTRÔLÉE DE MÉDICAMENT

Publication
EP 3996748 A4 20230913 (EN)

Application
EP 20836170 A 20200707

Priority
• TR 201910214 A 20190709
• TR 2020050592 W 20200707

Abstract (en)
[origin: WO2021006845A2] The present invention relates to temperature-sensitive smart hydrogels that feature antifungal property and perform controlled drug release. Smart hydrogels were developed to be used in the treatment of nail fungus. The inventive hydrogel formula comprises at least one natural polymer (polysaccharide and/or protein) additive, at least one inorganic or organic additive, and an active pharmaceutical ingredient with antifungal property. The antifungal drug in hydrogel formulation is released in a controlled manner, and this not only shortens the treatment period but also reduces the amount of the drug administered since the necessity for regularly administering drugs to the fungal infection area is eliminated.

IPC 8 full level
A61K 47/36 (2006.01); **A61K 9/06** (2006.01); **C08J 3/075** (2006.01)

CPC (source: EP)
A61K 9/0014 (2013.01); **A61K 9/06** (2013.01); **A61K 31/343** (2013.01); **A61K 31/4174** (2013.01); **A61K 31/496** (2013.01); **A61K 47/02** (2013.01); **A61K 47/36** (2013.01); **A61P 17/00** (2017.12)

Citation (search report)
• [I] CN 101260191 A 20080910 - UNIV WUHAN [CN]
• [A] WO 2010109418 A1 20100930 - VANANGAMUDI SULUR SUBRAMANIAM [IN], et al
• [AP] BOZOGLAN BAHAR KANCI ET AL: "Preparation and characterization of thermosensitive chitosan/carboxymethylcellulose/scleroglucan nanocomposite hydrogels", INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES, ELSEVIER BV, NL, vol. 162, 15 June 2020 (2020-06-15), pages 781 - 797, XP086280564, ISSN: 0141-8130, [retrieved on 20200615], DOI: 10.1016/J.IJBIOMAC.2020.06.087
• [T] KANCI BOZOGLAN BAHAR ET AL: "Smart antifungal thermosensitive chitosan/carboxymethylcellulose/scleroglucan/montmorillonite nanocomposite hydrogels for onychomycosis treatment", COLLOIDS AND SURFACES A : PHYSIOCHEMICAL AND ENGINEERINGS ASPECTS, ELSEVIER, AMSTERDAM, NL, vol. 610, 26 October 2020 (2020-10-26), XP086425431, ISSN: 0927-7757, [retrieved on 20201026], DOI: 10.1016/J.COLSURFA.2020.125600
• See references of WO 2021006845A2

Cited by
CN115160613A

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 2021006845 A2 20210114; **WO 2021006845 A3 20210311**; EP 3996748 A2 20220518; EP 3996748 A4 20230913;
TR 201910214 A2 20210121

DOCDB simple family (application)
TR 2020050592 W 20200707; EP 20836170 A 20200707; TR 201910214 A 20190709