

Title (en)
THERMOSENSITIVE, BIOCOMPATIBLE POLYMER CARRIERS WITH A VARIABLE PHYSICAL STRUCTURE FOR TREATMENT, DIAGNOSIS AND ANALYSIS

Title (de)
THERMOSENSITIVE, BIOKOMPATIBLE POLYMERTRÄGER MIT VERÄNDERBARER PHYSIKALISCHER STRUKTUR FÜR DIE THERAPIE, DIAGNOSTIK UND ANALYTIK

Title (fr)
SUPPORTS POLYMERES THERMOSENSIBLES, BIOCOMPATIBLES, COMPORTANT UNE STRUCTURE PHYSIQUE VARIABLE, DESTINES A LA THERAPIE, AU DIAGNOSTIC ET A L'ANALYSE

Publication
EP 1680142 A2 20060719 (DE)

Application
EP 04766003 A 20041022

Priority
• EP 2004011937 W 20041022
• DE 10350248 A 20031028

Abstract (en)
[origin: WO2005042142A2] The invention relates to biocompatible, thermosensitive polymers that can be heated by encapsulating magnetic and/or metallic colloids or magnetic nanoparticles by means of a high-frequency, magnetic alternating field. The inductive heating of the polymer matrix triggers physical structural changes in the polymer matrix, that lead to encapsulated bioactive substances being rapidly released in the polymer matrix. Said stimulus-response principle is used to produce controllable medicament depots, contrast-reinforcing means for NMR diagnosis, and manipulable microtools, as means for blocking blood vessels and as controllable porogens during the production of membranes.

IPC 1-7
A61K 41/00; **A61K 47/48**

IPC 8 full level
A61K 9/00 (2006.01); **A61K 33/00** (2006.01); **A61K 41/00** (2006.01); **A61K 47/48** (2006.01); **B01J 13/14** (2006.01); **C08J 7/16** (2006.01); **C09D 5/23** (2006.01); **H01F 1/00** (2006.01); **H01F 1/44** (2006.01)

IPC 8 main group level
B01J (2006.01)

CPC (source: EP US)
A61K 9/0009 (2013.01 - EP US); **A61K 41/0028** (2013.01 - EP US); **B82Y 5/00** (2013.01 - EP US); **Y10T 428/254** (2015.01 - EP US); **Y10T 428/2982** (2015.01 - EP US); **Y10T 428/2991** (2015.01 - EP US); **Y10T 428/32** (2015.01 - EP US)

Citation (search report)
See references of WO 2005042142A2

Citation (examination)
• WO 2005025508 A2 20050324 - TRUSTEE FOR THE BANKRUPTCY EST [US], et al
• WO 2005034912 A2 20050421 - SCIMED LIFE SYSTEMS INC [US], et al
• EP 2365007 A2 20110914 - PHILADELPHIA CHILDREN HOSPITAL [US], et al
• MOSBACH K ET AL: "Magnetic ferrofluids for preparation of magnetic polymers and their application in affinity chromatography", NATURE, vol. 270, no. 5634, 1977, pages 259 - 261, ISSN: 0028-0836
• "5' AMP Sepharose 4B", pages 1 - 8, Retrieved from the Internet <URL:http://www.gelifesciences.co.jp/tech_support/manual/pdf/71709100ac.pdf> [retrieved on 20100510]
• BULTE ET AL.: "PEGylated Magnetoliposomes as Long-Circulating Drug Carriers for MR Imaging", YOU HAVE FULL TEXT ACCESS TO THIS CONTENTPROCEEDINGS OF THE INTERNATIONAL SOCIETY FOR MAGNETIC RESONANCE IN MEDICINE, no. s1, 1997, pages 1596

Cited by
CN105504314A; CN108059887A

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2005042142 A2 20050512; **WO 2005042142 A3 20051110**; **WO 2005042142 A8 20051208**; DE 10350248 A1 20050616; EP 1680142 A2 20060719; US 2007148437 A1 20070628

DOCDB simple family (application)
EP 2004011937 W 20041022; DE 10350248 A 20031028; EP 04766003 A 20041022; US 57802404 A 20041022