

Title (en)

Intravascularly-administrable, magnetically-localizable biodegradable carrier and process for its preparation.

Title (de)

Intravascular verabreichbarer, magnetisch lokalisierbarer biologisch abbaubarer Substanzträger und Verfahren zu ihrer Herstellung.

Title (fr)

Véhicule biodégradable pouvant être localisé par magnétisme et administré par voie intravasculaire ainsi qu'un procédé pour sa préparation.

Publication

**EP 0000667 A1 19790207 (EN)**

Application

**EP 78300208 A 19780728**

Priority

- US 82081277 A 19770801
- US 85984277 A 19771212

Abstract (en)

[origin: CA1109792A] The intravascularly-administrable, magnetically-local-izable biodegradable carrier comprises microspheres formed from an amino acid polymer matrix with magnetic particles embedded therein. The microspheres can be used for intra-arterial administration and capillary level localization and/or release of therapeutic and diagnostic agents, thereby obtaining much more precise targeting of the agents than has heretofore been possible. Also a process is provided for incorporating water-soluble therapeutic agents in albumin microspheres. This process is particularly advantageous where the therapeutic agent is heat-sensitive. All steps of the process can be carried out at relatively low temperatures, such as ambient room temperature. The process may be applied to the preparation of the above mentioned intravascularly-administrable, magnetically-responsive microspheres.

IPC 1-7

**A61K 9/50**; **A61K 9/00**; **A61K 9/52**

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

- US 3474777 A 19691028 - FIGGE FRANK H J, et al
- [D] US 3937668 A 19760210 - ZOLLE ILSE
- GB 929401 A 19630619 - UPJOHN CO
- [A] FR 2326934 A1 19770506 - MINNESOTA MINING & MFG [US]
- [A] FR 1468601 A 19670210 - NCR CO
- [A] FR 1351358 A 19640207 - NCR CO
- [A] US 3725113 A 19730403 - CHANG T
- [A] US 3190837 A 19650622 - CARL BRYNKO, et al
- [A] US 3057344 A 19621009 - ALBERTO ABELLA CARLOS, et al
- [A] US 2971916 A 19610214 - LOWELL SCHLEICHER, et al
- [A] US 2671451 A 19540309 - BOLGER STEPHEN J
- [A] NL 280825 A
- [A] NL 280826 A
- CHEMICAL ABSTRACTS, vol. 80, no. 5, March 11, 1974. Columbus, Ohio, (USA) TAKAI et al: "Coated magnetic powder"; & JP-B-48 024 246 (TDK ELECTRONICS) page 298, abstract no. 52392a

Cited by

US4983402A; EP0252118A4; DE3508000A1; US5879681A; EP0042249A3; EP0409893A4; US5447728A; US4976968A; EP0303045A1; EP0054396A1; US5162037A; USRE35862E; US5271961A; US2017296406A1; EP0318512A4; EP0545913A1; GR1000047B; US5401516A; US5443841A; US5679377A; US5223242A; EP0178769A3; US4793825A; WO2018015733A1; WO9106286A1; WO2023068069A1; EP2062914A2

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