980623-9
IPOS

PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : A61K 49/00 — A2

(11) International Publication Number: WO 97/25073

(43) International Publication Date: 17 July 1997 (17.07.97)

(21) International Application Number: PCT/GB97/00067

(22) International Filing Date: 9 January 1997 (09.01.97)

(30) Priority Data:
9600427.0 — 10 January 1996 (10.01.96) — GB
08/729,836 — 15 October 1996 (15.10.96) — US

(60) Parent Application or Grant
(63) Related by Continuation
US — 08/729,836 (CIP)
Filed on — 15 October 1996 (15.10.96)

(71) Applicant *(for all designated States except US)*: NYCOMED IMAGING A/S [NO/NO]; Nycoveien 1-2, N-0401 Oslo (NO).

(71)(72) Applicant and Inventor *(for GB only)*: COCKBAIN, Julian [GB/GB]; 27 Ladbroke Road, London W11 3PD (GB).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: GUNTHER, Wolfgang [US/US]; Nycomed Inc., 466 Devon Park Drive, Wayne, PA 19087-8630 (US). KELLAR, Kenneth [US/US]; Nycomed Inc., 466 Devon Park Drive, Wayne, PA 19087-8630 (US). FUJII, Dennis, Kiyoshi [US/US]; Nycomed Inc., 466 Devon Park Drive, Wayne, PA 19087-8630 (US). DESAI, Vinay [IN/US]; Nycomed Inc., 466 Devon Park Drive, Wayne, PA 19087-8630 (US). BLACK, Christopher [GB/US]; Nycomed Inc., 466 Devon Park Drive, Wayne, PA 19087-8630 (US). BEEBER, Marshall [US/US]; Nycomed Inc., 466 Devon Park Drive, Wayne, PA 19087-8630 (US). WELLONS, Jennifer [US/US]; Nycomed Inc., 466 Devon Park Drive, Wayne, PA 19087-8630 (US). FAHLVIK, Anne, Kjersti [NO/NO]; Nycomed Imaging a.s, Nycoveien 1-2, N-0401 Oslo (NO). NAEVESTAD, Anne [NO/NO]; Nycomed Imaging a.s, Nycoveien 1-2, N-0401 Oslo (NO). NA, George [US/US]; Nycomed Inc., 466 Devon Park Drive, Wayne, PA 19087-8630 (US). YUAN, Barbara [US/US]; Nycomed Inc., 466 Devon Park Drive, Wayne, PA 19087-8630 (US). STEVENS, Jack [US/US]; Nycomed Inc., 466 Devon Park Drive, Wayne, PA 19087-8630 (US). WEEKLEY, Brian [US/US]; Nycomed Inc., 466 Devon Park Drive, Wayne, PA 19087-8630 (US). ENGELL, Torgrim [NO/NO]; Nycomed Imaging a.s, Nycoveien 1-2, N-0401 Oslo (NO). GACEK, Michel [NO/NO]; Nycomed Imaging a.s, Nycoveien 1-2, N-0401 Oslo (NO). LADD, David, Lee [US/US]; Nycomed Inc., 466 Devon Park Drive, Wayne, PA 19087-8630 (US). SINGH, Jasbir [US/US]; Nycomed Inc., 466 Devon Park Drive, Wayne, PA 19087-8630 (US). BACON, Edward, Richard [US/US]; Nycomed Inc., 466 Devon Park Drive, Wayne, PA 19087-8630 (US). McINTIRE, Gregory, Lynn [US/US]; Nycomed Inc., 466 Devon Park Drive, Wayne, PA 19087-8630 (US). SNOW, Robert, Alan [CA/US]; Nycomed Inc., 466 Devon Park Drive, Wayne, PA 19087-8630 (US).

(74) Agents: COCKBAIN, Julian et al.; Frank B. Dehn & Co., 179 Queen Victoria Street, London EC4V 4EL (GB).

(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).

Published
Without international search report and to be republished upon receipt of that report.

(54) Title: CONTRAST MEDIA

(57) Abstract

The invention relates to MR contrast media containing composite nanoparticles, preferably comprising a superparamagnetic iron oxide core provided with a coating comprising an oxidatively cleaved starch coating optionally together with a functionalized polyalkyleneoxide which serves to prolong blood residence.