(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
29 April 2004 (29.04.2004)

PCT

(10) International Publication Number
WO 2004/035620 A1

(51) International Patent Classification[7]: C07K 14/435, G01N 33/533, C07K 19/00

(21) International Application Number: PCT/EP2003/011626

(22) International Filing Date: 21 October 2003 (21.10.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
02023452.2 21 October 2002 (21.10.2002) EP

(71) Applicant *(for all designated States except US)*: **AXXAM S.R.L.** [IT/IT]; Via olgettina, 58, I-20132 Milano (IT).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **FOTI, Maria** [IT/IT]; Via Massena 12/7 int.1, I 20145 Milano (IT). **LOHMER, Stefan** [DE/IT]; Via Olgettina, 58, I-20132 Milano (IT).

(74) Agents: **BANFI, Paolo,** et al.; Bianchetti Bracco Minoja S.r.l., Via Rossini, 8, I-20122 Milano (IT).

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2004/035620 A1

(54) Title: PHOTOPROTEIN WITH IMPROVED BIOLUMINESCENCE

(57) Abstract: Disclosed is a photoprotein with improved luminescent activity, the use thereof as calcium indicator and in cell-based assays for the detection and measurement of intracellular calcium.