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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
9 October 2003 (09.10.2003)

PCT

(10) International Publication Number
WO 03/083136 A1

(51) International Patent Classification[7]: C12Q 1/68, G01N 33/68, C12Q 1/37

(21) International Application Number: PCT/EP03/03287

(22) International Filing Date: 28 March 2003 (28.03.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
02007427.4 28 March 2002 (28.03.2002) EP

(71) Applicant *(for all designated States except US)*: **DUAL-SYSTEMS BIOTECH AG** [CH/CH]; Winterthurerstrasse 190, CH-8057 Zürich (CH).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **STAGLJAR, Igor** [CH/CH]; Hündlerstrasse 91, CH-8406 Winterthur (CH). **HOTTIGER, Michael** [CH/CH]; Wildsbergstrasse 17, CH-8610 Uster (CH). **AUERBACH, Daniel** [CH/CH]; Klingenstrasse 21, CH-8005 Zürich (CH).

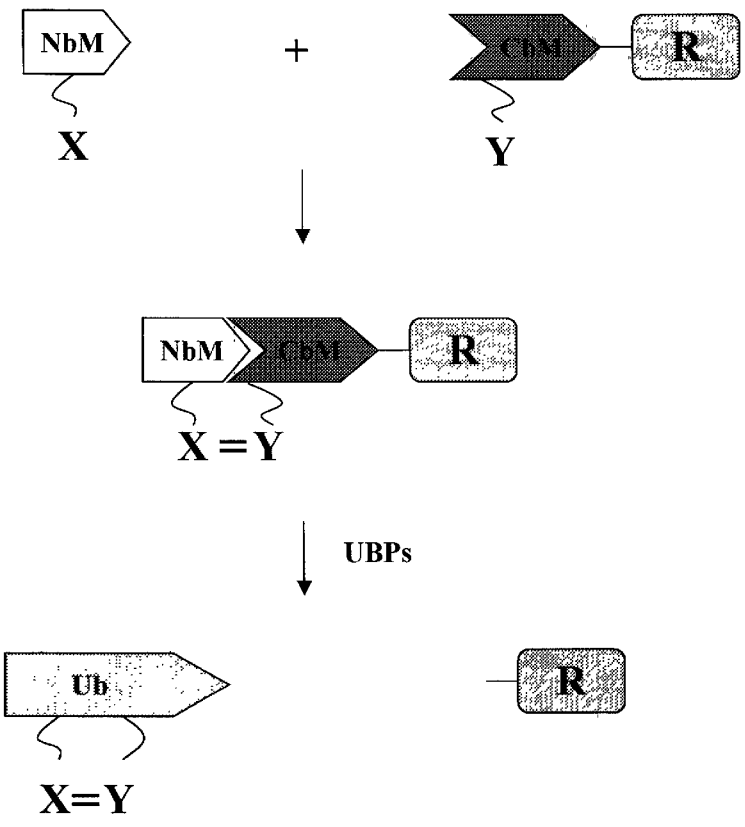
(74) Agent: **GRÜNECKER, KINKELDEY, STOCKMAIR & SCHWANHÄUSSER**; Maximilianstrasse 58, 80538 München (DE).

(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, 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, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, 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,

[Continued on next page]

(54) Title: METHOD AND KIT FOR DETECTING MEMBRANE PROTEIN-PROTEIN INTERACTIONS



(57) Abstract: The present invention is concerned with a method and a kit for detecting an interaction between a first membrane bound test protein or fragment thereof and a second test protein or fragment thereof which is either membrane bound or soluble with an *in vivo* genetic system based in yeast, bacterial or mammalian cells. The system makes use of the reconstitution of the split ubiquitin protein.

WO 03/083136 A1

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.