

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

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
22 March 2001 (22.03.2001)

PCT

(10) International Publication Number
WO 01/19842 A1

(51) International Patent Classification⁷: C07H 21/02,
21/04, C12N 5/00, 5/02, 15/00, 15/09, 15/63, 15/70,
15/74, C07K 1/00, 14/00, 16/00, 17/00, C08H 1/00, C12P
21/00, A01K 67/00, 67/033

[US/US]; 4 Redgate Drive, Medway, MA 02053 (US).
MEADE, Harry, M. [US/US]; 62 Grasmere Street,
Newton, MA 02458 (US). BOSSLET, Klaus [DE/DE];
Schering AG, 13342 Berlin (DE).

(21) International Application Number: PCT/US00/25558

(74) Agent: MYERS, Louis; Fish & Richardson P.C., 225
Franklin Street, Boston, MA 02110-2804 (US).

(22) International Filing Date:

18 September 2000 (18.09.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

09/399,079 17 September 1999 (17.09.1999) US

(63) Related by continuation (CON) or continuation-in-part
(CIP) to earlier application:

US 09/399,079 (CIP)
Filed on 17 September 1999 (17.09.1999)

(81) Designated States (*national*): AF, AG, AI, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ,
DE, DK, DM, DZ, 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, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

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

(71) Applicant (*for all designated States except US*): GEN-
ZYME TRANSGENICS CORPORATION [US/US];
175 Crossing Boulevard, Framingham, MA 01701-9322
(US).

Published:

— With international search report.

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): POLLOCK, Dan

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

WO 01/19842 A1

(54) Title: SUBUNIT OPTIMIZED FUSION PROTEINS

(57) Abstract: A method of making a fusion protein having: a first member, fused to a second member wherein the first and second members are chosen such that the fusion protein assembles into a complex having a number of subunits which optimizes activity of the multimeric form of the second member.