

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
28 August 2003 (28.08.2003)

PCT

(10) International Publication Number
WO 03/070764 A1

(51) International Patent Classification⁷: **C07K 14/555**,
14/56, 1/04

(21) International Application Number: PCT/EP03/01745

(22) International Filing Date: 19 February 2003 (19.02.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
02075722.5 19 February 2002 (19.02.2002) EP

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(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, 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

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.

(54) Title: METHOD FOR PRODUCING INTERFERON

(57) **Abstract:** The invention relates to a method for the chemical synthesis of interferon proteins containing one or more cysteine residues, by the native chemical ligation of segments of the full length interferon protein. The segments of the protein are selected based on the position of the cysteine residues in the interferon protein, with the position of the cysteine residue as a potential site of native chemical ligation. The full-length, fully deprotected polypeptide is folded into biologically active interferon protein by oxidation of the cysteine residues. The invention further relates to the production of the individual peptide fragments which act as intermediates in the synthesis of interferon-alpha. The present invention still further relates to groups of such peptide intermediates which can be utilized together to produce interferon-alpha and interferon-alpha-like proteins.



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