

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
26 January 2006 (26.01.2006)

PCT

(10) International Publication Number
WO 2006/008163 A3

(51) International Patent Classification:
C07K 14/435 (2006.01) **D01F 4/02** (2006.01)

(21) International Application Number:
PCT/EP2005/007968

(22) International Filing Date: 21 July 2005 (21.07.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/590,196 22 July 2004 (22.07.2004) US

(71) Applicant (for all designated States except US): **TECH-
NISCHE UNIVERSITAET MUENCHEN** [DE/DE]; Ar-
cisstrasse 21, 80333 Muenchen (DE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SCHEIBEL,**
Thomas [DE/DE]; Josephsburgstrasse 68, 81673
Muenchen (DE). **HUEMMERICH, Daniel** [DE/DE];
Malvenweg 33, 85375 Mintraching (DE). **ACKER-
SCHOTT, Christian** [DE/DE]; Schleissheimerstrasse
276, 80809 Muenchen (DE).

(74) Agent: **BEHNISCH, Werner**; Reinhard, Skuhra, Weise &
Partner GbR, Friedrichstrasse 31, 80801 Muenchen (DE).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, 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, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ,
OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,
SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
VN, YU, ZA, ZM, ZW.

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

Published:

— with international search report

(88) Date of publication of the international search report:
8 June 2006

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.

(54) Title: RECOMBINANT SPIDER SILK PROTEINS

(57) Abstract: The present invention is directed to recombinant spider silk proteins, nucleic acids, coding for these recombinant spider silk proteins, as well as hosts suitable for expressing those nucleic acids. Furthermore, the present invention is directed to a method of aggregation of spider silk proteins and the use of the proteins in the field of biotechnology and/or medicine and other industrial fields, in particular in the manufacture of automotive parts, in the aircraft construction, in the processing of textiles and leather, as well as in the manufacture and processing of paper and the like.



WO 2006/008163 A3