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<p>(21) International Application Number: PCT/EP99/00477</p> <p>(22) International Filing Date: 25 January 1999 (25.01.99)</p> <p>(30) Priority Data: 98200193.5 23 January 1998 (23.01.98) EP</p> <p>(71) Applicant (for all designated States except US): VLAAMS INTERUNIVERSITAIR INSTITUUT VOOR BIOTECH- NOLOGIE [BE/BE]; Rijvisschestraat 120, B-9052 Zwij- naarde (BE).</p> <p>(72) Inventors; and</p> <p>(75) Inventors/Applicants (for US only): SCHOONJANS, Rein- hilde [BE/BE]; Kerkstraat 25, B-9850 Landegem (BE). MERTENS, Nico [BE/BE]; Pauwstraat 58, B-9120 Melsele (BE).</p> <p>(74) Agent: DE CLERCQ, Ann; Ann De Clercq &amp; Co. B.V.B.A., Brandstraat 100, B-9830 Sint-Martens-Latem (NL).</p>	<p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, 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, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, 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).</p> <p><b>Published</b></p> <p><i>With international search report.</i></p> <p><i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p>	
<p>(54) Title: MULTIPURPOSE ANTIBODY DERIVATIVES</p>		
<p>(57) Abstract</p>		
<p>The present invention relates to a class of molecules specified as novel multipurpose antibody derivatives. This class of molecules is created by heterodimerization of two constituting components. Heterodimerization is obtained by the specific heterotypic interaction of a chosen VH-CH1 combination of immunoglobulin domains, with a chosen VL-CL combination of immunoglobulin domains. The VHCH1-VLCL interaction is proposed as a very efficient heterodimerization scaffold that could be efficiently produced. By choosing the appropriate VH and VL domains in the VHCH1 and VLCL context, a binding specificity can be constituted by the heterodimerization scaffold itself. One or both of the comprising VHCH1 and VLCL chains can thus be extended at either the N- or the C-terminus or both with other molecules, such as a toxin polypeptide, an enzyme, a hormone, a cytokine, a signaling molecule, or a single chain linked Fv fragment with the same or a different specificity.</p>		