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(21) International Application Number: PCT/SE99/02306 (22) International Filing Date: 9 December 1999 (09.12.99) (30) Priority Data: 9804415-9 18 December 1998 (18.12.98) SE (71) Applicant (for all designated States except US): SBL VACCIN AB [SE/SE]; Lundagatan 2, S-105 21 Stockholm (SE). (72) Inventors; and (75) Inventors/Applicants (for US only): CARLIN, Nils [SE/SE]; Stallknechtsgränd 14, S-165 57 Hässelby (SE). ASKELOF, Per [SE/SE]; Aspvägen 1A, S-191 41 Sollentuna (SE). BJARE, Ulf [SE/SE]; Nödhärsvägen 80, S-757 57 Uppsala (SE). (74) Agents: NILSSON, Brita et al.; AB Stockholms Patentbyrå, Zacco & Bruhn, Box 23101, S-104 35 Stockholm (SE).	(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, 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, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, 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). Published With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.	
(54) Title: ORAL VACCINE AGAINST DIARRHEA (57) Abstract An oral vaccine composition against enterotoxigenic <i>E. coli</i> caused diarrhea in humans is disclosed. It comprises a defined amount of at least three different types of colonization factor antigens (CFAs), e.g. 100 to 300 µg of each type, selected from the group consisting of CFA I, CFA II (CS1, CS2 and CS3) and CFA IV (CS4, CS5 and CS6), on killed <i>E. coli</i> bacteria lacking the gene encoding the heat labile enterotoxin (LT⁻), together with a defined amount of the B-subunit of cholera toxin (CTB), e.g. 0.5-2.0 mg, and a vehicle, such as PBS, which vaccine composition is purified from possible heat stable enterotoxin (ST).		