



(51) International Patent Classification:

E02D 5/18 (2006.01) *E02D 19/18* (2006.01)
E02D 17/13 (2006.01) *E02D 29/16* (2006.01)

(21) International Application Number:

PCT/EP2010/054178

(22) International Filing Date:

30 March 2010 (30.03.2010)

(25) Filing Language:

English

(26) Publication Language:

English

(71) Applicant (for all designated States except US): **VSL INTERNATIONAL AG** [CH/CH]; Sägestrasse 76, CH-3098 Köniz (CH).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **DELETANG, Alain** [FR/FR]; Les Souvenets, La Musse, F-49160 Blou (FR). **CHAN, Ping Cheung** [CN/CN]; 35A, Block 3, Nerine Cove, 23 Hang, Fu Street, Tuen Mun, New Territories, Hong Kong (CN). **HAYE, Olivier** [FR/FR]; 36bis Rue de Montagland, F-49400 Bagneux (FR).

(74) Agent: **BOVARD AG**; Optingenstrasse 16, CH-3000 Bern 25 (CH).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, 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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

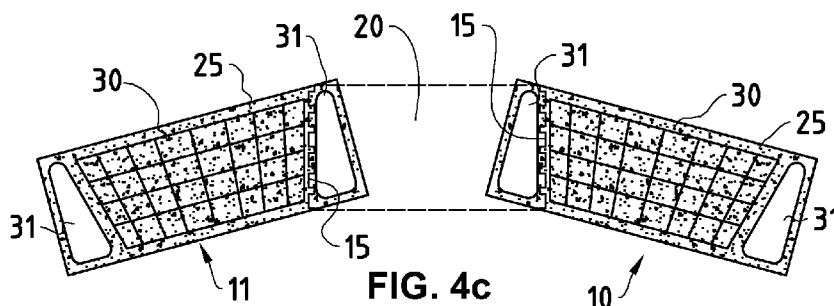
Declarations under Rule 4.17:

— of inventorship (Rule 4.17(iv))

Published:

— with international search report (Art. 21(3))

(54) Title: METHOD AND ASSEMBLY FOR CONSTRUCTING A DIAPHRAGM WALL



(57) Abstract: A method is disclosed for constructing a diaphragm wall by casting alternate primary (10, 11) and secondary (20) panels in the ground. The primary panels (10, 11) are excavated and cast first, and a cutter joint (15) or similar jointing profile is then milled into the side faces of the primary panels (10, 11) before casting the secondary panels (10). The primary panel casting regions are prepared for casting by positioning sacrificial displacement elements (31) in the regions where joint milling is to be performed. The sacrificial displacement elements (31) may be hollow elements or blocks of relatively easily millable material such as lightweight concrete. Primary panels (10, 11) cast in this way can be milled more easily, and particularly when the milling tool is at an angle to the surface being milled.