



(51) International Patent Classification:

H01R 29/00 (2006.01) H01R 13/631 (2006.01)
H01R 13/648 (2006.01) H01R 12/77 (2011.01)
H01R 13/516 (2006.01) H01R 4/01 (2006.01)
H01R 13/627 (2006.01) H01R 13/504 (2006.01)
H01R 13/642 (2006.01)

(21) International Application Number:

PCT/US2011/038452

(22) International Filing Date:

27 May 2011 (27.05.2011)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/349,737	28 May 2010 (28.05.2010)	US
61/353,126	9 June 2010 (09.06.2010)	US
61/356,499	18 June 2010 (18.06.2010)	US
61/407,363	27 October 2010 (27.10.2010)	US
61/436,545	26 January 2011 (26.01.2011)	US
61/436,490	26 January 2011 (26.01.2011)	US

(71) Applicant (for all designated States except US):
ZENITH INVESTMENTS LLC [—/US]; 1209 Orange
Street, Wilmington, DE 19801 (US).

(72) Inventors; and

(71) Applicants: **GOLKO, Albert J** [US/US]; 1209 Orange
Street, Wilmington, DE 19801 (US). **SCHMIDT, Math-**
ias [CA/US]; 1209 Orange Street, Wilmington, DE 19801
(US). **SPRAGGS, Ian** [CA/US]; 1209 Orange Street,
Wilmington, DE 19801 (US). **FRAZIER, Cameron** [US/
US]; 1209 Orange Street, Wilmington, DE 19801 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **JOL, Eric**
[CA/US]; 1209 Orange Street, Wilmington, DE 19801

(US). **MINOO, Jahan** [US/US]; 1209 Orange Street,
Wilmington, DE 19801 (US). **ROTHKOPF, Fletcher**
[US/US]; 1209 Orange Street, Wilmington, DE 19801
(US). **AASE, Jonathan** [US/US]; 1209 Orange Street,
Wilmington, DE 19801 (US). **SANDERS, Wendel** [US/
US]; 1209 Orange Street, Wilmington, DE 19801 (US).
TERLIZZI, Jeffrey J. [US/US]; 1209 Orange Street,
Wilmington, DE 19801 (US).

(74) Agents: **SHAFFER, William** et al.; Kilpatrick Townsend
& Stockton LLP, Two Embarcadero Center, 8th Floor,
San Francisco, California 94111-3834 (US).

(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.

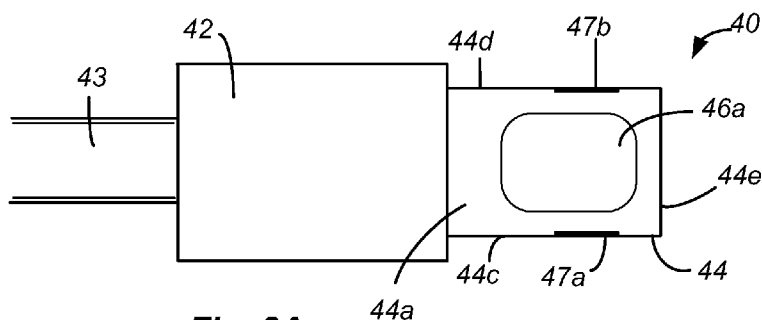
(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG,
ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ,
TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU,
LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, 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:

— as to applicant's entitlement to apply for and be granted
a patent (Rule 4.17(ii))

[Continued on next page]

(54) Title: DUAL ORIENTATION CONNECTOR WITH EXTERNAL CONTACTS

**Fig. 3A**

(57) Abstract: A dual orientation connector having a connector tab with first and second major opposing sides and a plurality of electrical contacts carried by the connector tab. The plurality of contacts includes a first set of external contacts formed at the first major side and a second set of external contacts formed at the second major side. The first plurality of contacts are symmetrically spaced with the second plurality of contacts and the connector tab is shaped to have 180 degree symmetry so that it can be inserted and operatively coupled to a corresponding receptacle connector in either of two insertion orientations.



Published:

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

— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))