



- (51) International Patent Classification:
G06F 3/041 (2006.01)
- (21) International Application Number:
PCT/US2012/053585
- (22) International Filing Date:
3 September 2012 (03.09.2012)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
61/530,988 4 September 2011 (04.09.2011) US
- (71) Applicant (for all designated States except US):
NEONODE INC. [US/US]; 2350 Mission College Blvd.,
Suite 190, Santa Clara, CA 95054 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **FROJDH, Martin,**
Gunnar [SE/SE]; Dalarövägen 236, S-137 71 Dalarö (SE).
HENRIKSSON, Carl, Richard [SE/SE]; Linnégatan 31,

S-114 47 Stockholm (SE). **ELYAN, Michael, Lawrence**
[AU/AU]; 77 St Georges Crescent, Drummoyne, 2047
(AU). **ERIKSSON, Thomas** [SE/SE]; Storängsstigen 15C,
S-182 74 Stocksund (SE). **SHAIN, Joseph** [US/IL]; 27-B
Pinsker Street, 76308 Rehovot (IL). **JANSSON, Anders**
[SE/SE]; Hasselnötsvägen 25, S-138 34 Älta (SE). **KV-**
IST, Niklas [SE/SE]; Björnklostigen 9, S-139 40 Varmdo
(SE). **PETTERSSON, Robert** [SE/SE]; Folkparksvägen
164, S-126 39 Hagersten (SE). **SPARF, Lars** [SE/SE];
Rödarsvgränd 14, S-162 45 Vällingby (SE). **KARLSSON,**
John [SE/SE]; Tingvallavägen 16a, S-195 32 Märsta (SE).

(74) Agent: **BERGER, Marc, A.**; Soquel Group LLC, P.O.
Box 691, Soquel, CA 95073 (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, BN, 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,

[Continued on next page]

(54) Title: LIGHT ACTUATOR FOR MOVABLE BUTTONS ON A KEYPAD

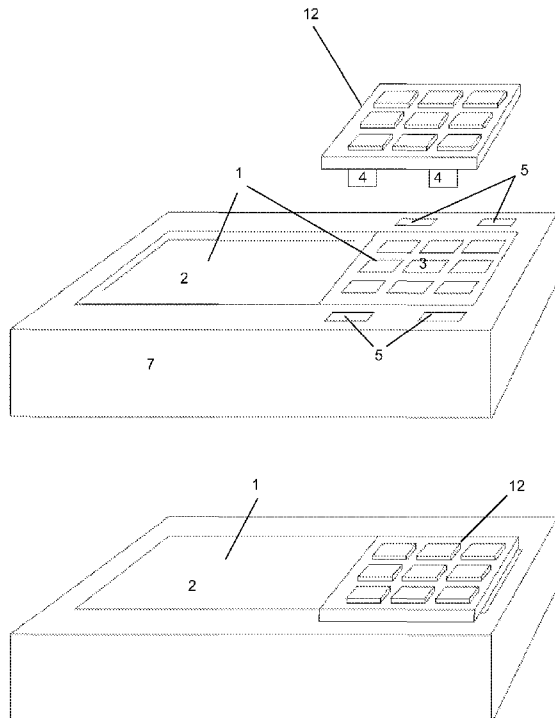


FIG. 1

(57) Abstract: A keypad for use in conjunction with a touch-sensitive panel, the keypad including a frame surrounding a touch-sensitive panel, including a plurality of buttons suspended by the frame above the touch-sensitive panel, each of the buttons including a rigid member that is lowered through the frame when pressure is applied from above, and a resilient body attached to the rigid member and to the frame for raising the rigid member when the pressure from above is released, wherein the rigid members are exposed below the frame.



ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, 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.

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).

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ,

Published:

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