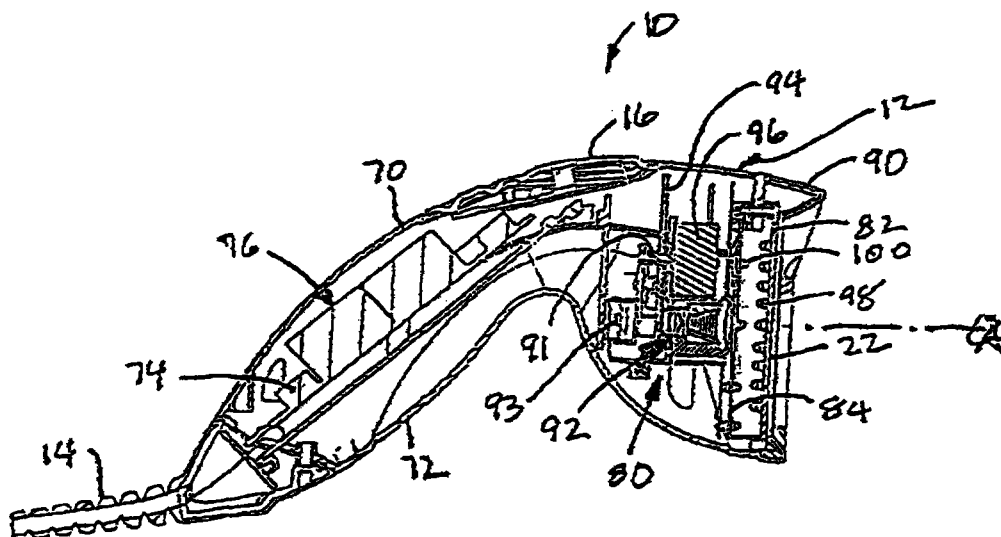




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(21) International Application Number: PCT/US99/18845 (22) International Filing Date: 10 September 1999 (10.09.99) (30) Priority Data: 09/151,764 11 September 1998 (11.09.98) US (71) Applicant: ROBOTIC VISION SYSTEMS INC. [-/US]; 5 Shawmut Road, Canton, MA 02021 (US). (72) Inventors: DOWLING, John, H.; 49 Windemere Way, Nashua, NH 03063 (US). STERN, Howard; 89 Derby Avenue, Greenlawn, NY 11740 (US). FIGARELLA, Luis, Alberto; 27 Todd Road, Nashua, NH 03060 (US). McKINLEY, Harry, R.; 58 Rattle Hill Road, Southampton, MA 01073 (US). McKINLEY, Philip, E.; 85 West Street, Westford, MA 01866 (US). LEE, Jason, J.; 86 Harrington Avenue, Concord, MA 01742 (US). (74) Agents: ROBINSON, Douglas, W. et al.; Hoffman, Wasson & Gitler, P.C., Suite 522, 2361 Jefferson Davis Highway, Arlington, VA 22202 (US).		(81) Designated States: AE, AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, UZ, VN, YU, ZA, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, 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). Published <i>With international search report.</i>

(54) Title: OPTICAL SYMBOLOGIES IMAGER



(57) Abstract

A hand-held imager (10) which is capable of reading both linear and two dimensional symbologies, which can perform focusing and illuminating steps quickly and accurately so as to eliminate variation in the position of the imager (10) relative to the code becoming a negative factor, in which can operate in environment where the imager (10) is anywhere from 1.5 inches to 16 inches from the code. The imager (10) includes an imaging system having a focusing system, an illumination system (82), and a two-dimensional photodetector (93) which forms an image of the coded symbology. After achieving targeting of the coded symbology, the scanning system adjusts the focus between multiple different focuses, and utilizes a portion of the two-dimensional photodetector (93) to determine the optimum focus.