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(71) Applicant (for all designated States except US): **INTEL CORPORATION** [US/US]; 2200 Mission College Boulevard, MS: RNB-4-150, Santa Clara, California 95052 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **FERREN, Bran** [US/US]; 1236 Benedict Canyon Drive, Beverly Hills, California 90210 (US). **NISHIHARA, H., Keith** [US/US]; 1469 Richardson Ave., Los Altos, California 94024 (US).

(74) Agents: **VINCENT, Lester J.** et al.; Blakely Sokoloff Taylor & Zafman, 1279 Oakmead Parkway, Sunnyvale, California 94085 (US).

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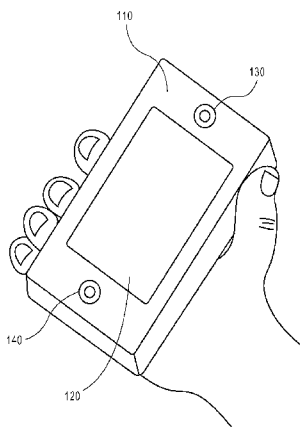
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(54) Title: CAMERA APPLICATIONS IN A HANDHELD DEVICE

FIG. 1



(57) Abstract: A hand held device containing at least one camera can perform various functions. In some embodiments, digitized images taken with two or more camera lenses having different fixed focal lengths may be combined to emulate a high-resolution optical zoom, and may also permit the device to perform 3D applications. In other embodiments, a device containing a camera may perform as a bar code reader, and may wirelessly transmit and/or visually present a bar code to other devices. Movable optics may permit the same camera to focus on either distant objects or on a close-up bar code.

