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(71) Applicant: **MAGIC LEAP, INC.** [US/US]; 7500 West Sunrise Boulevard, Plantation, FL 33322 (US).

(72) Inventors: **ZAHNERT, Martin Georg**; Dorfstrasse 49, 8037 Zurich (CH). **ILIC, Alexander**; Begonienstrasse 5, 8057 Zurich (CH). **FONSEKA, Erik**; 900 High School Way, Apartment # 2303, Mountain View, CA 94041 (US).

(74) Agent: **LI, Lin** et al.; Wolf, Greenfield & Sacks, P.C., 600 Atlantic Avenue, Boston, MA 02210-2206 (US).

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(54) Title: EVENT-BASED IR CAMERA

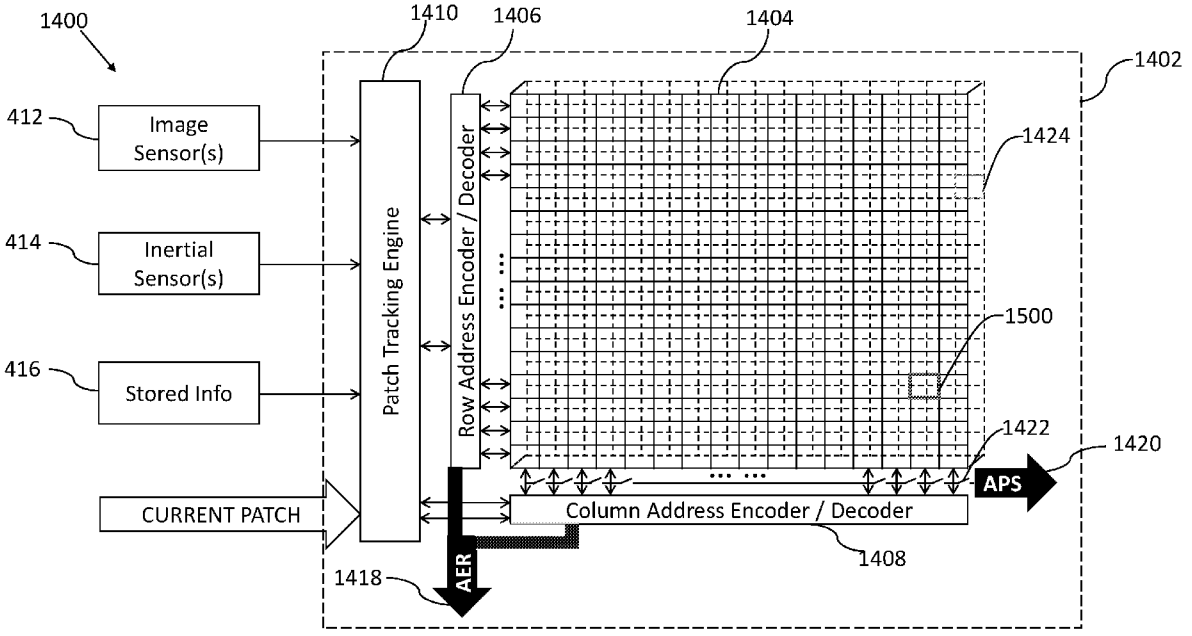


FIG. 14

(57) Abstract: A high-resolution image sensor suitable for use in an augmented reality (AR) system. The AR system may be small enough to be packaged within a wearable device such as a set of goggles or mounted on a frame resembling ordinary eyeglasses. The image sensor may have pixels configured to output events indicating changes in sensed IR light. Those pixels may be sensitive to IR light of the same frequency source as an active IR light source, and may be part of an eye tracking camera, oriented toward a user's eye. Changes in IR light may be used to determine the location of the user's pupil, which may be used in rendering virtual objects. The events may be generated and processed at a high rate, enabling the system to render the virtual object based on the user's gaze so that the virtual object will appear more realistic to the user.

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[Continued on next page]

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