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(54) SYSTEM WITH ONE-WAY FILTER OVER LIGHT-EMITTING ELEMENTS

(71) Applicant: **Apple Inc.**, Cupertino, CA (US)

(72) Inventors: **Xiaofeng Tang**, Santa Clara, CA (US); **Bryce E Wallis**, Palo Alto, CA (US); **Christopher P Child**, San Jose, CA (US); **Clarisse Mazuir**, San Jose, CA (US); **Kurt R Stiehl**, Los Gatos, CA (US); **Rong Liu**, Sunnyvale, CA (US); **Yong Seok Choi**, Pleasanton, CA (US); **Yu P Sun**, Yorba Linda, CA (US)

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(57) **ABSTRACT**

A system may have an exterior display. The exterior display may display symbols that correspond to intended actions for the system or instructions for nearby viewers. The exterior display may include an array of light-emitting diodes, a collimator, a one-way filter to prevent sunlight from washing out the display, and a cover layer. The one-way filter may include a microlens array and a masking layer. The collimator is configured to collimate light from the array of light-emitting diodes and provide the collimated light to the one-way filter. The microlens array receives the collimated light and focuses the collimated light through a plurality of holes in the masking layer. In this way, the majority of display light is passed through the one-way filter towards a viewer. However, the majority of ambient sunlight is blocked by the masking layer, thus preserving a high contrast for the exterior display even in bright sunlight.