

ABSTRACT**ENHANCED-LIGHT-COLLECTION-EFFICIENCY SENSOR**

5 A microlens (202) and microlens array which collect light incident upon image sensor pixels (201,301,401). The microlens comprises two parts one (206,306,406) which collects light from the cross-sectional area lying over the light-detection area and the second (203,303,403) which collects light from the corner areas of the pixel lying outside the cross-sectional area of the light-detection area. Light from each of the two areas is refracted onto an associated light-detection area (212,312,412). Essentially all of the light incident upon the pixel can thus be collected and refracted to the photosensitive area.

(Figure 2C)