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[Continued on next page]

(54) **Title:** GENERALIZED ASSORTED PIXEL CAMERA SYSTEMS AND METHODS

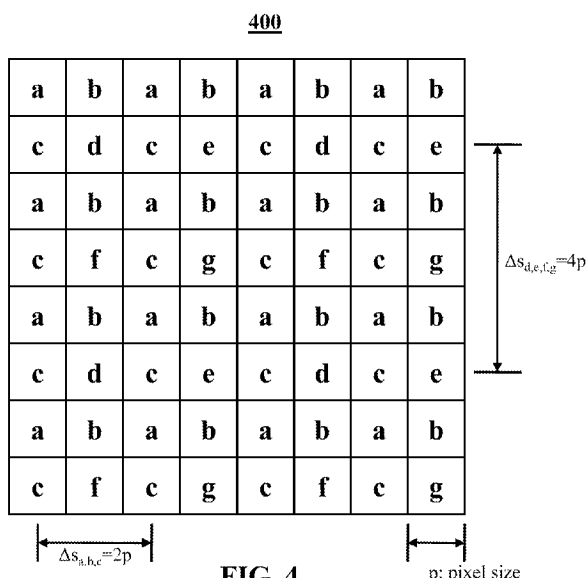


FIG. 4

(57) **Abstract:** Generalized assorted pixel camera systems and methods are provided. In accordance with some embodiments, the generalized assorted pixel camera systems include a color filter array, where the color filter array includes a plurality of primary filters and a plurality of secondary filters. Each filter has a particular spectral response and each filter is formed on a corresponding pixel of a plurality of pixels. Each of the plurality of primary filters and the plurality of secondary filters enhances an attribute of image quality and the information obtained using the plurality of primary filters and the plurality of secondary filters is used to balance spectral resolution, dynamic range, and spatial resolution for generating an image of a plurality of image types.

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<p>C. DOCUMENTS CONSIDERED TO BE RELEVANT</p> <table border="1"> <thead> <tr> <th>Category*</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>Y</td> <td>US 6,690,422 B1 (DALY et al) 10 February 2004 (10.02.2004) entire document</td> <td>1-47</td> </tr> <tr> <td>Y</td> <td>US 7,304,771 B2 (WALMSLEY et al) 04 December 2007 (04.12.2007) entire document</td> <td>1-47</td> </tr> </tbody> </table>			Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	Y	US 6,690,422 B1 (DALY et al) 10 February 2004 (10.02.2004) entire document	1-47	Y	US 7,304,771 B2 (WALMSLEY et al) 04 December 2007 (04.12.2007) entire document	1-47
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<p>Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201</p>		<p>Authorized officer: Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774</p>									