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(54) **LENSET CAMERA WITH ROTATED SENSORS**

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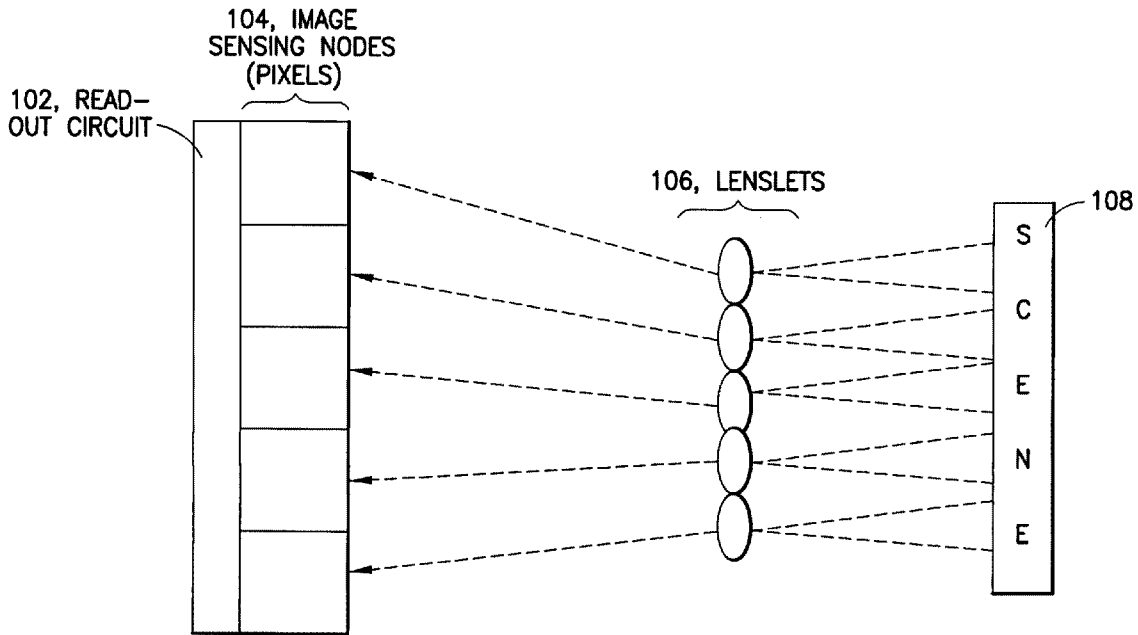
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(57) **ABSTRACT**

At a digital imaging system, a first set of samples of a scene are digitally captured with a first array of image sensing nodes while simultaneously a second set of samples of the scene are digitally captured with a second array of image sensing nodes. Image sensing nodes of the second array are oriented in a rotated position relative to the image sensing nodes of the first array. The first and second sets of samples are integrated with one another while correcting for the rotated orientation of the image sensing nodes of the second array relative to the image sensing nodes of the first array, and from that integration is output a high resolution image. In specific embodiments, there may be additional arrays of image sensing nodes, different arrays may sample different size portions of the scene, and be also rotated relative to other sensing node arrays.



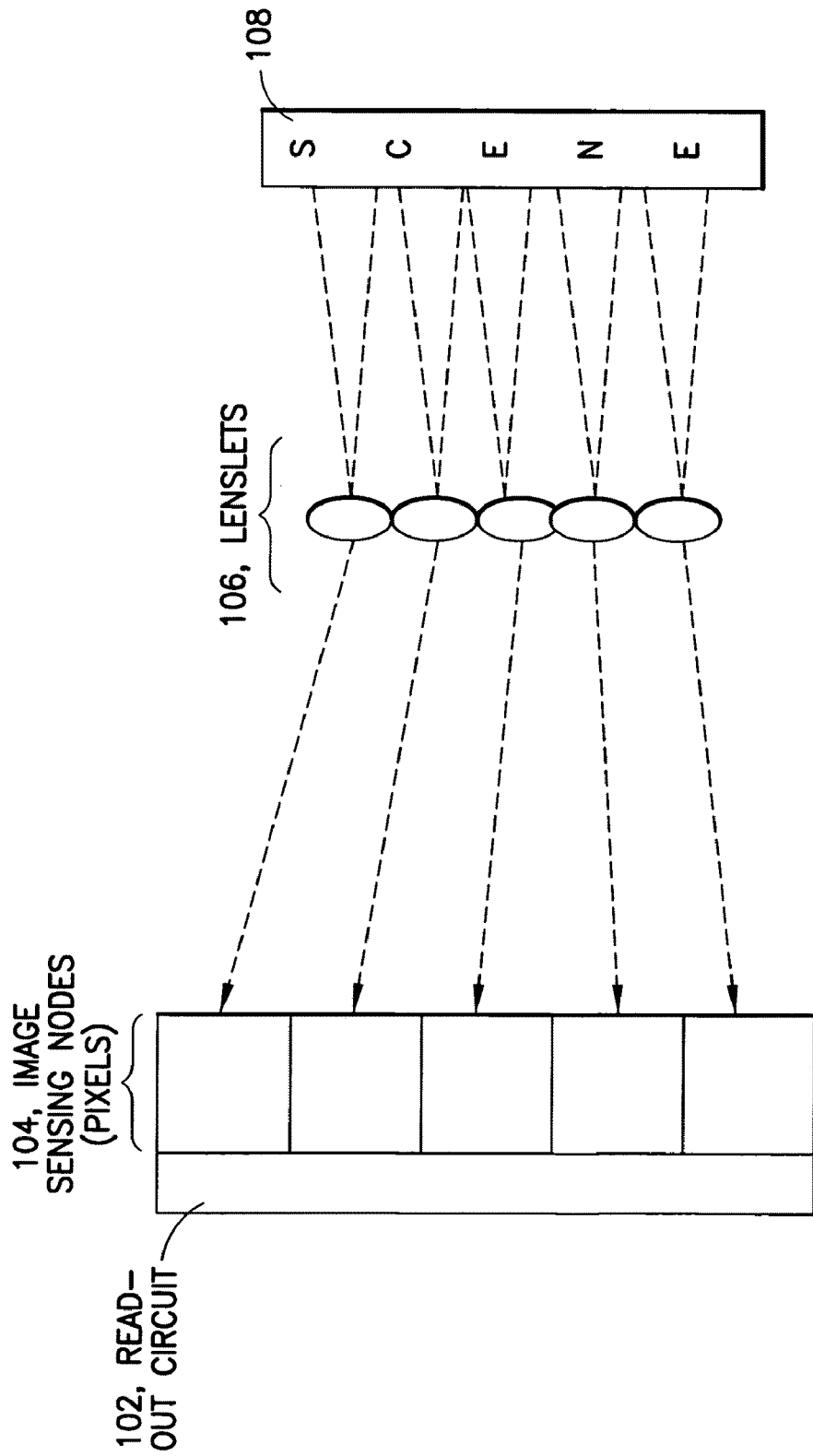


FIG.1

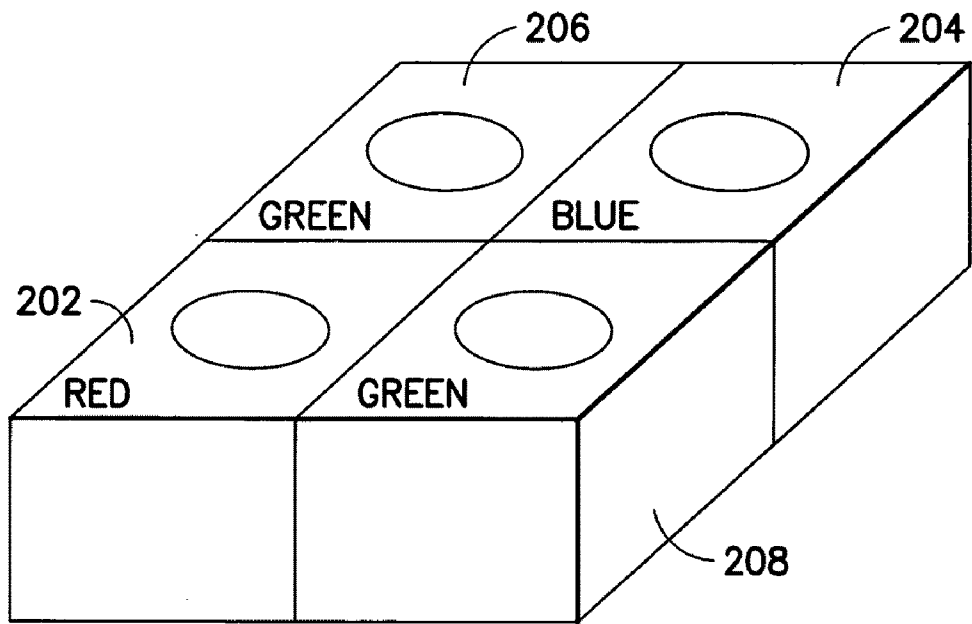


FIG. 2

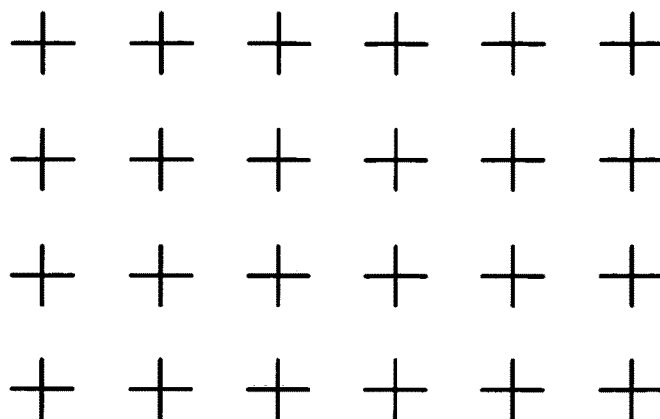


FIG.3A

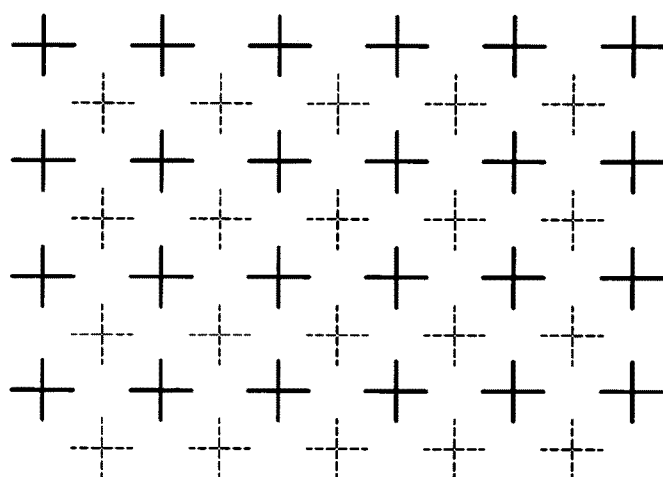


FIG.3B

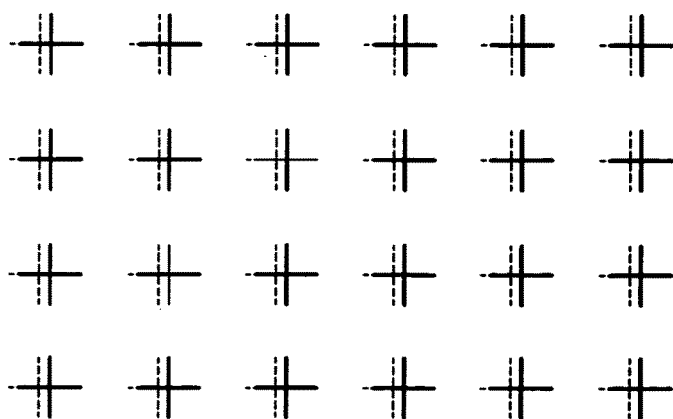


FIG.3C

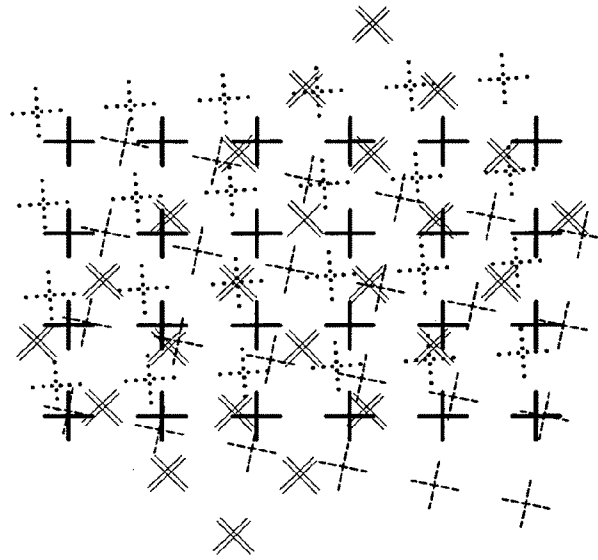


FIG. 4A

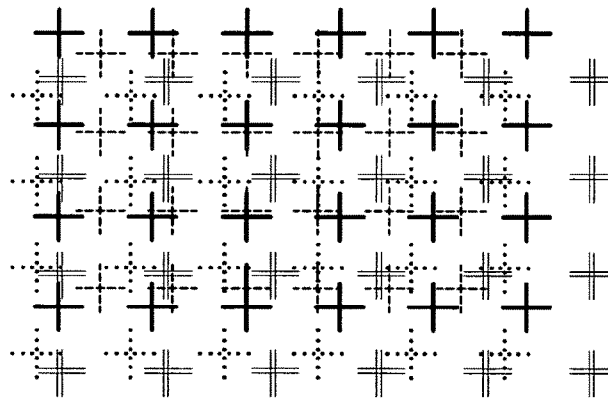


FIG. 4B

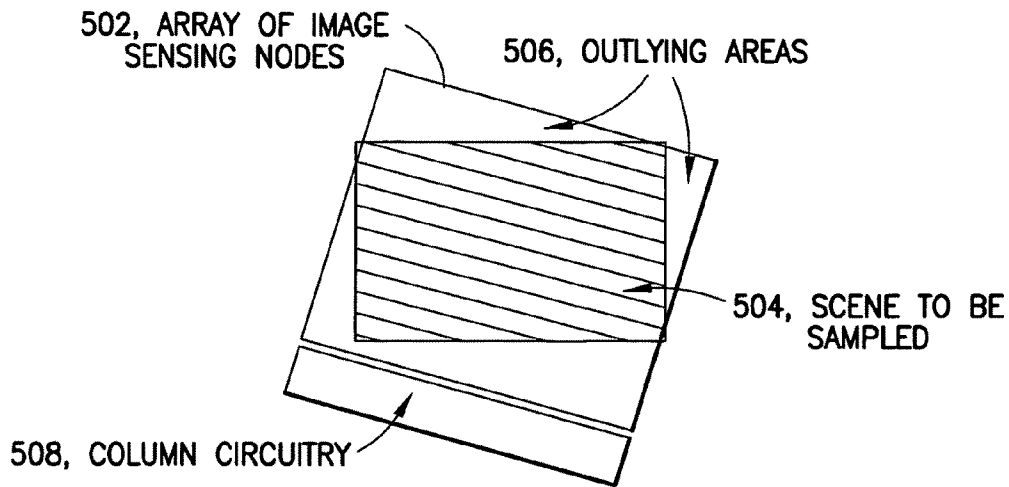


FIG. 5

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