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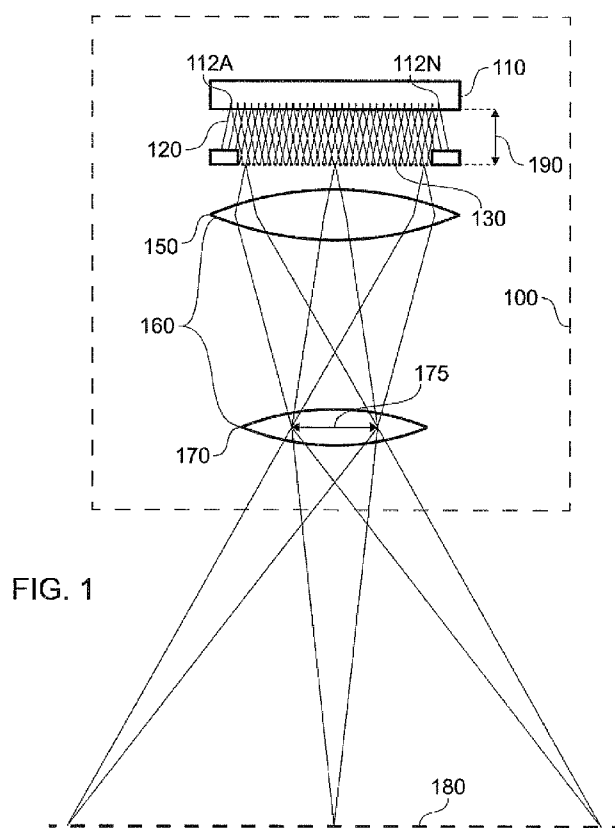
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(54) Title: THREE DIMENSIONAL CAMERA AND PROJECTOR FOR SAME



(57) Abstract: A 3D imaging apparatus comprising a projector, comprising a laser array comprising a plurality of individual emitters, a mask for providing a structured light pattern, wherein a distance between the laser array and the mask is substantially minimized according to a non-uniformity profile of the plurality of individual emitters and according to a uniformity criterion related to the light intensity distribution across the mask plane, projection optics to image the structured light pattern onto an object, an imaging sensor adapted to capture an image of the object with the structured light pattern projected thereon and a processing unit adapted to process the image to determine range parameters.



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