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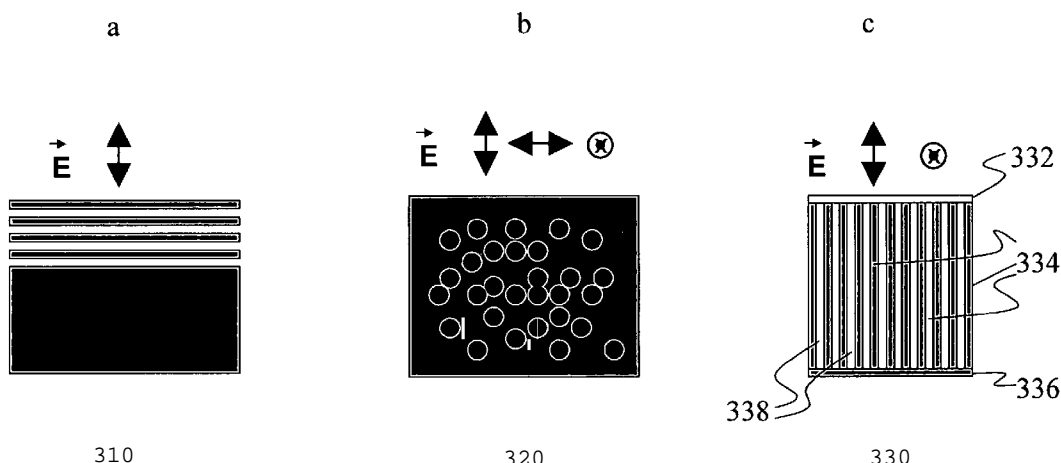
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(54) **Title:** OPTOELECTRONIC DEVICES UTILIZING MATERIALS HAVING ENHANCED ELECTRONIC TRANSITIONS



(57) **Abstract:** An optoelectronic device that includes a material 134 (fig 1c) having enhanced electronic transitions. The electronic transitions are enhanced by mixing electronic states at an interface. The interface may be formed by a nano-well, a nano-dot, or a nano-wire.



WO 2008/063209 A3

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C DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
Y	US 2003/0189202 (Li et al), 09 Oct 2003 (09 10 2003), paragraph [0035], figure 4e	10, 16
Y	US 2005/0024790 (Pmarbasi) 03 Feb 2005 (03 02 2005), figure 10	9, 30
Y	US 2005/0196707 (Cok) 08 Sep 2005 (08 09 2005), paragraphs[0016]-[0025], figure 6	1-8, 11-15, 17-29, 31
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