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(54) MULTIJUNCTION SOLAR CELLS HAVING A GRADED-INDEX STRUCTURE

(57) A multijunction solar cells that include one or more graded-index structures disposed directly above the growth substrate beneath a base layer of a solar subcells. In some embodiments, the graded-index reflector structure is constructed such that (i) at least a portion of light of a first spectral wavelength range that enters and passes through a solar cell above the graded-index reflector structure is reflected back into the solar subcell by the graded-index reflector structure; and (ii) at least a portion of light of a second spectral wavelength range that enters and passes through the solar cell above the graded-index reflector structure is transmitted through the graded-index reflector structure to layers disposed beneath the graded-index reflector structure. The second spectral wavelength range is composed of greater wavelengths than the wavelengths of the first spectral wavelength range.

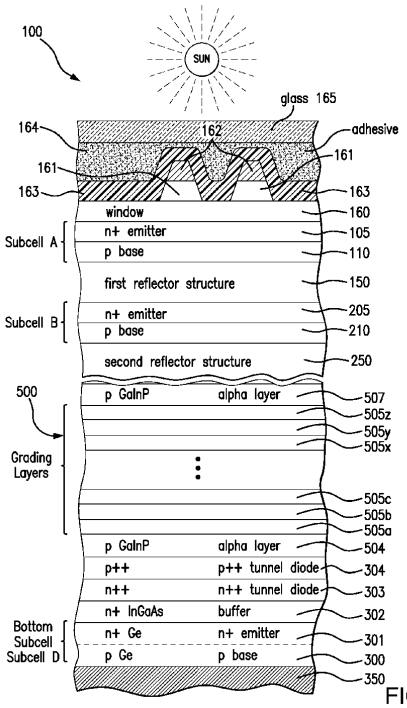

FIG. 9

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