ABSTRACT

THIN SILICON OR GERMANIUM SHEETS AND PHOTOVOLTAICS FORMED FROM THIN SHEETS

Thin semiconductor foils can be formed using light reactive deposition. These foils can have an average thickness of less than 100 microns. In some embodiments, the semiconductor foils can have a large surface area, such as greater than about 900 square centimeters. The foil can be free standing or releasably held on one surface. The semiconductor foil can comprise elemental silicon, elemental germanium, silicon carbide, doped forms thereof, alloys thereof or mixtures thereof. The foils can be formed using a release layer that can release the foil after its deposition. The foils can be patterned, cut and processed in other ways for the formation of devices. Suitable devices that can be formed form the foils include, for example, photovoltaic modules and display control circuits.

Most Illustrative: Fig 31

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