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NEW PHOTOVOLTAIC CELLS

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(Abstract of article "Neue Lichtelemente", pp 112-114. April 1951, Das Elektron
in Wissenschaft und Technik)

A significant improvement of photovoltaic cells is obtained if the covering layer is made of a semiconductor instead of a metal. The poor conductivity of semiconductors is made up for by the significantly greater light sensitivity. If one succeeds in increasing the conductivity of the semiconductor through defect spots (Stoerstellen), which is possible without considerably decreasing the light sensitivity outside the natural absorption, then such a new cell will exhibit much greater photoelectric yield. An additional advantage is that the covering layer may be made thicker than in the older cells. This results in a greater stability of the cell under higher temperatures, which factor is of decisive importance in a number of technical applications.

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