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(54) Title: METHOD AND APPARATUS FOR THERMIONIC GENERATOR (57) Abstract An improved thermionic generator constructed using microengineering techniques is described. This device is easy to construct in large numbers, efficient, and inexpensive. A preferred thermionic converter cell (14) uses a micromachined silicon wafer (1) having a depression (3) surrounded by an edge region (4). The floor of the depression (3) is doped to form a doped region (7) on which a coating (8) is formed. The preferred coating is silver which is oxidized and cesiated. Tungsten may also be used for the coating which is then thoriated. These cells (14) may be joined together at the edge regions (4) in large arrays to form a thermionic generator.		