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(71) Applicant (for all designated States except US): **MATSUSHITA ELECTRIC WORKS, LTD.** [JP/JP]; 1048, Oaza-Kadoma, Kadoma-shi, Osaka, 5718686 (JP).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **HONDA, Yoshiaki** [JP/JP]; c/o Matsushita Electric Works, Ltd., 1048,

Oaza-Kadoma, Kadoma-shi, Osaka, 5718686 (JP).
NISHIKAWA, Takayuki [JP/JP]; c/o Matsushita Electric Works, Ltd., 1048, Oaza-Kadoma, Kadoma-shi, Osaka, 5718686 (JP).

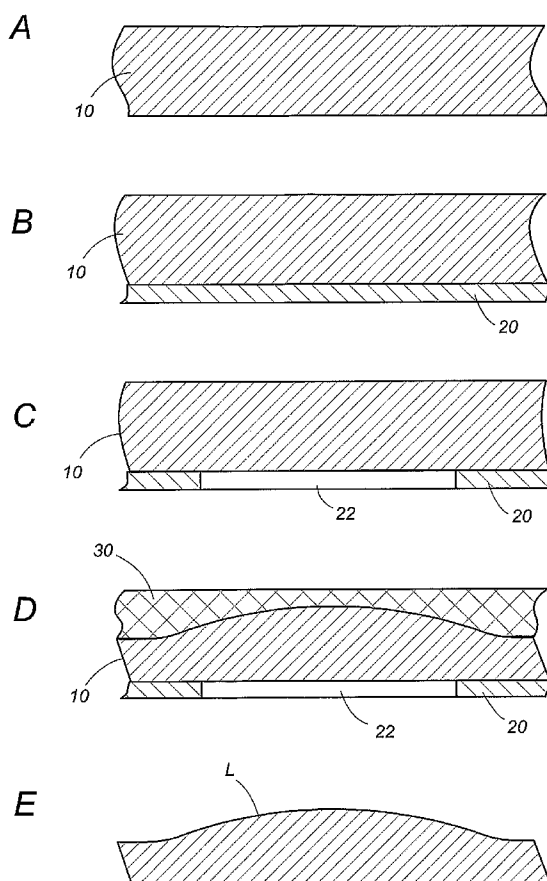
(74) Agents: **NISHIKAWA, Yoshikiyo** et al.; Hokuto Patent Attorneys Office Umeda-Daiichiseimei Bldg. 5th Floor, 12-17, Umeda 1-chome, Kita-ku, Osaka-shi, Osaka 5300001 (JP).

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(54) Title: PROCESS OF FORMING A CURVED PROFILE ON A SEMICONDUCTOR SUBSTRATE



(57) Abstract: A semiconductor substrate is shaped to have a curved surface profile by anodization. Prior to being anodized, the substrate is finished with an anode pattern on its bottom surface so as to be consolidated into a unitary structure in which the anode pattern is precisely reproduced on the substrate. The anodization utilizes an electrolytic solution which etches out oxidized portion as soon as it is formed as a result of the anodization, to thereby develop a porous layer in a pattern in match with the anode pattern. The anode pattern brings about an in-plane distribution of varying electric field intensity by which the porous layer develops into a shape complementary to a desired surface profile. Upon completion of the anodization, the curved surface is revealed on the surface of the substrate by etching out the porous layer and the anode pattern from the substrate.

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