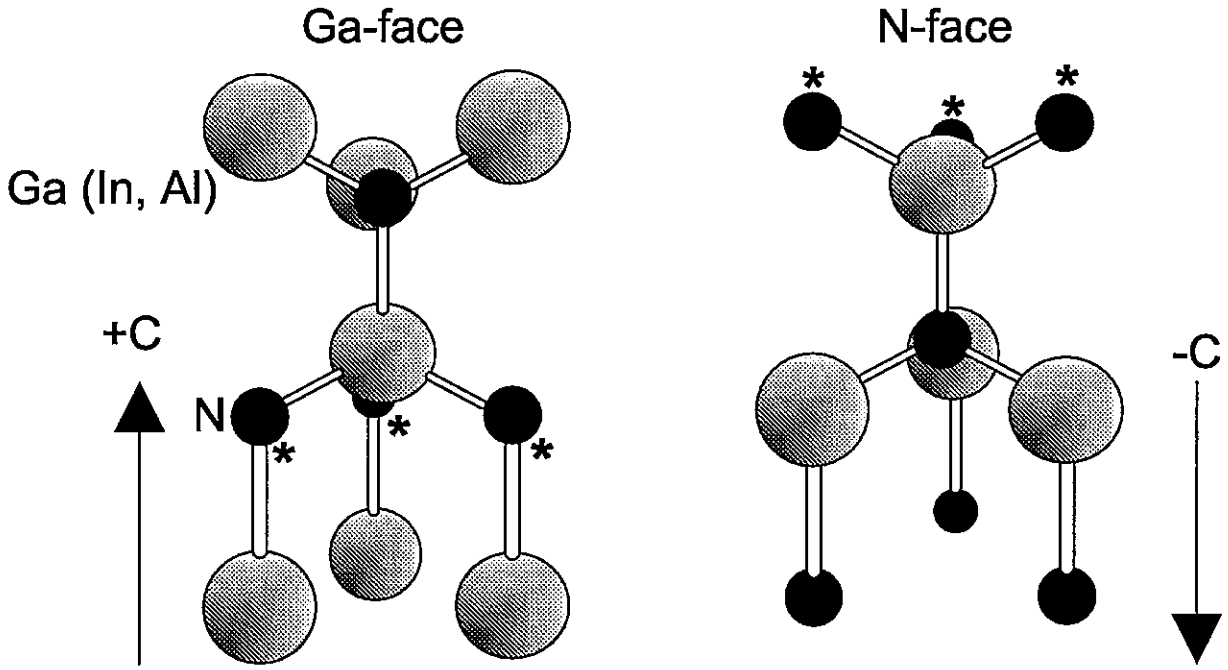


FIG. 1

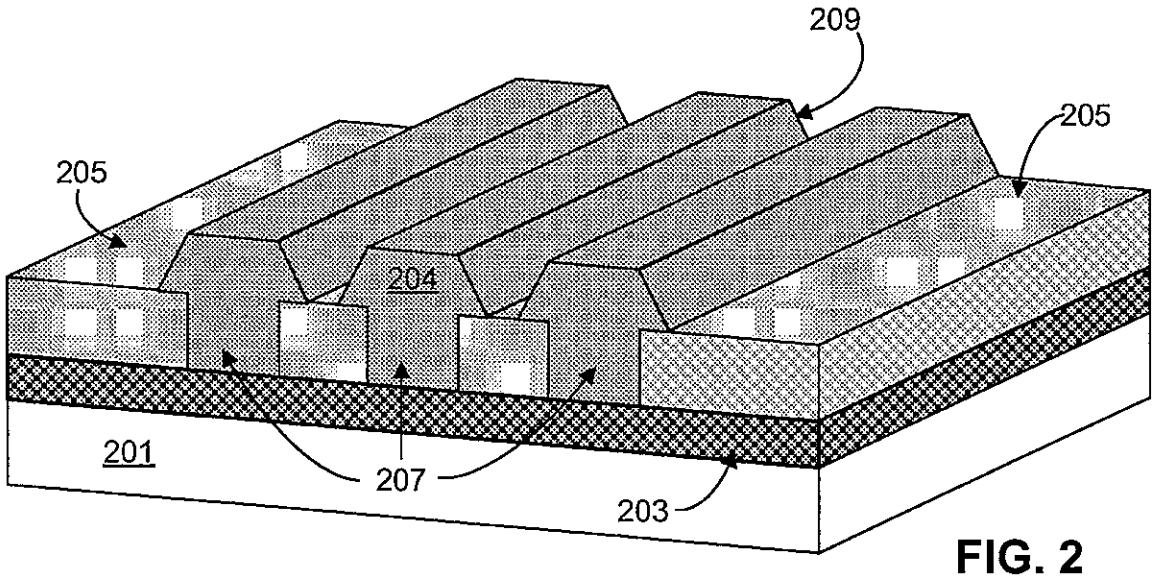


FIG. 2

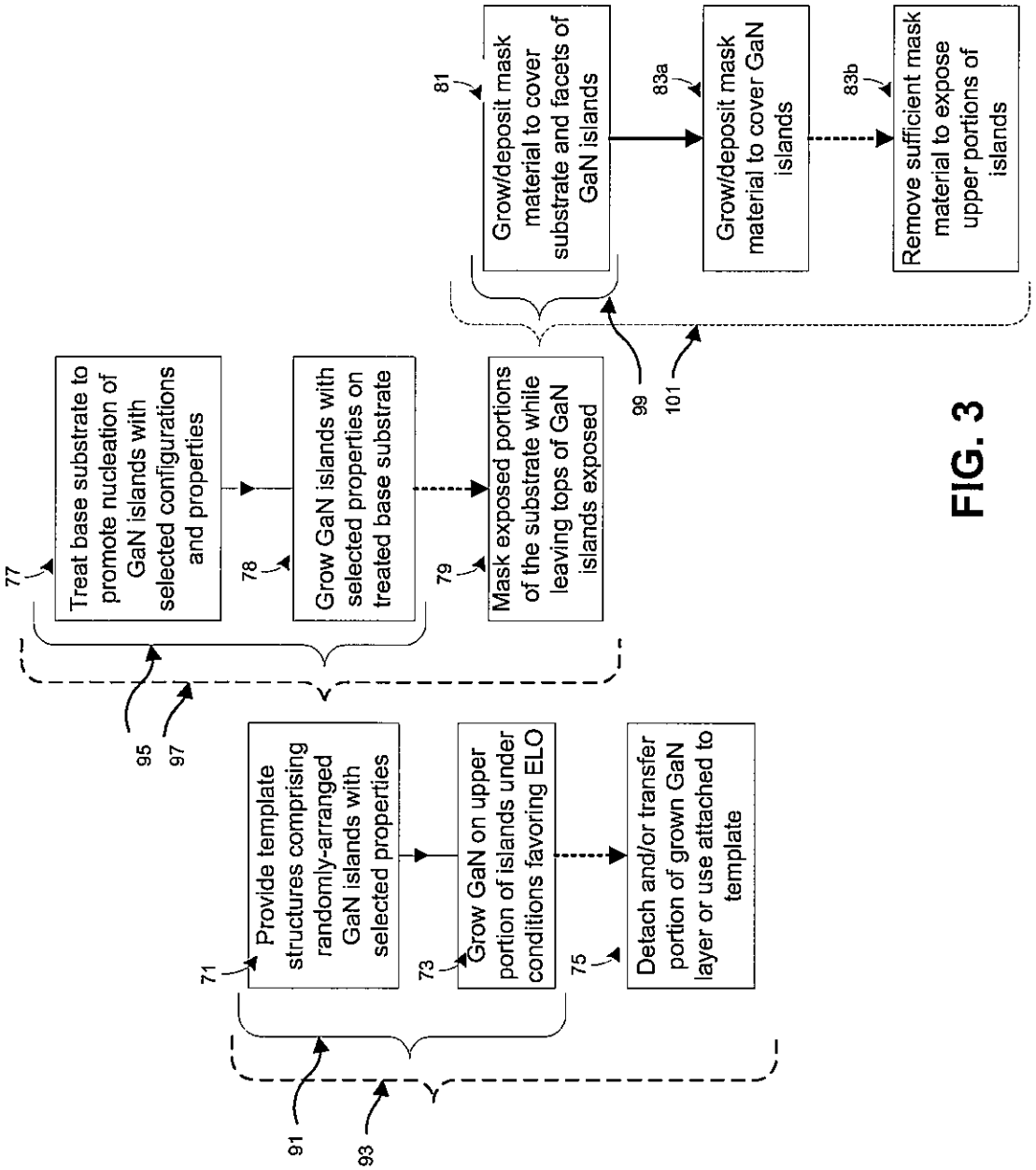

Provide template structures comprising randomly-arranged GaN islands with selected properties
Grow GaN on upper portion of islands under conditions favoring ELO
Detach and/or transfer portion of grown GaN layer or use attached to template
Treat base substrate to promote nucleation of GaN islands with selected configurations and properties
Grow GaN islands with selected properties on treated base substrate
Mask exposed portions of the substrate while leaving tops of GaN islands exposed
Grow/deposit mask material to cover substrate and facets of GaN islands
Grow/deposit mask material to cover GaN islands
Remove sufficient mask material to expose upper portions of islands
71
73
75
77
78
79
81
83a
83b
91
93
95
97
99
101

FIG. 3

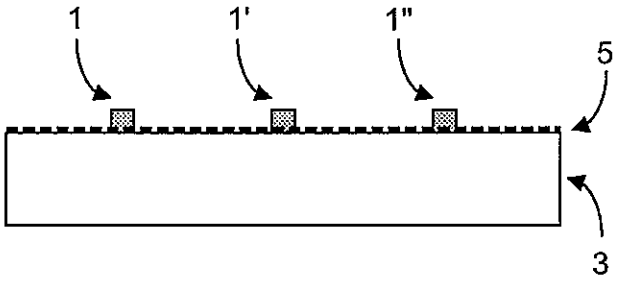


FIG. 4A

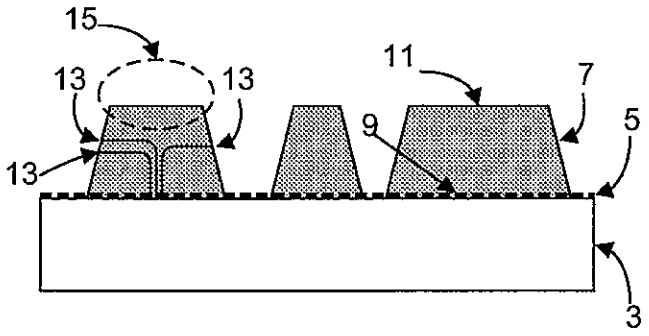


FIG. 4B

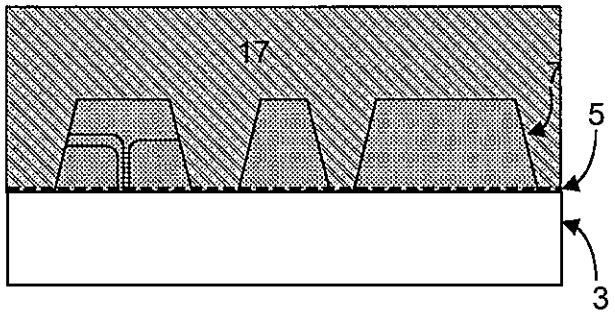


FIG. 4C

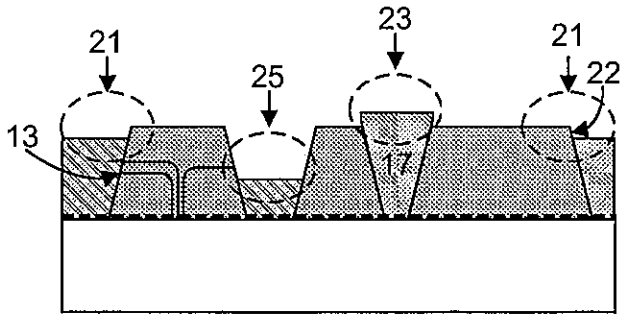


FIG. 4D

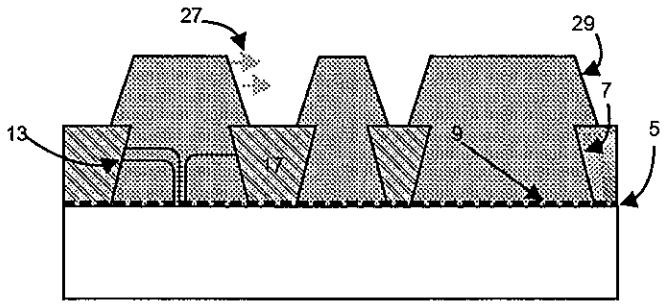


FIG. 4E

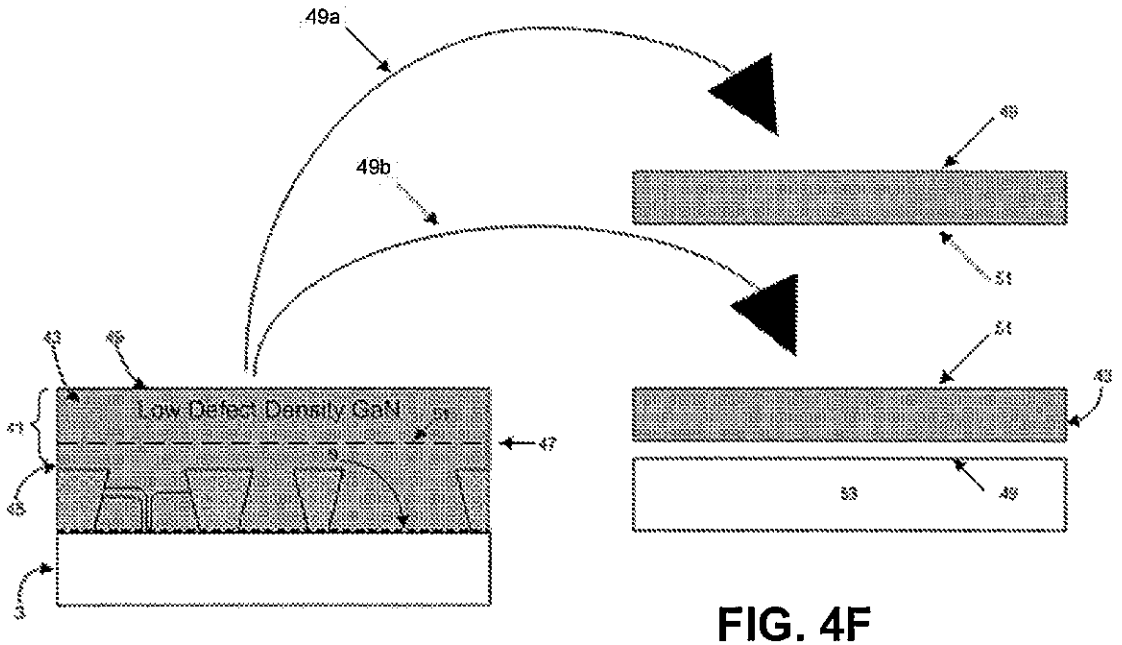


FIG. 4F

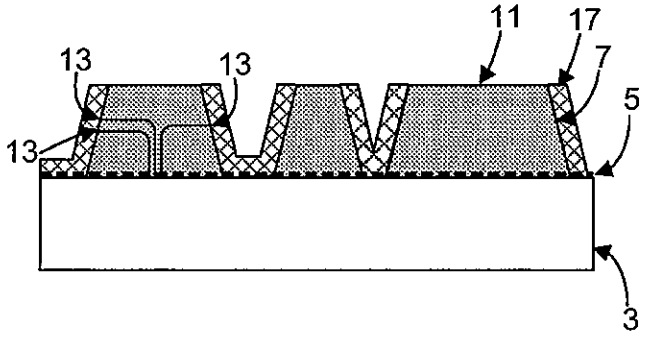


Fig. 5A

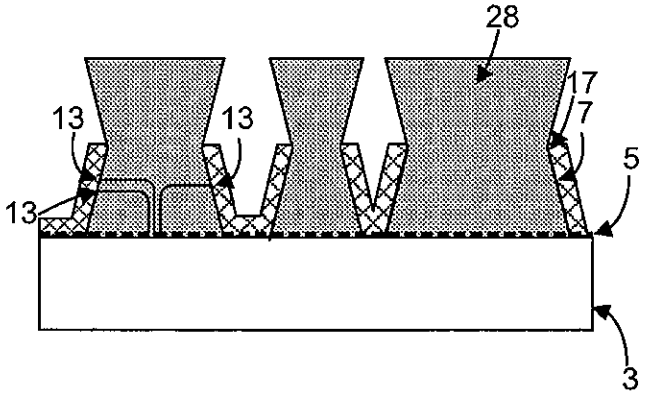


Fig. 5B

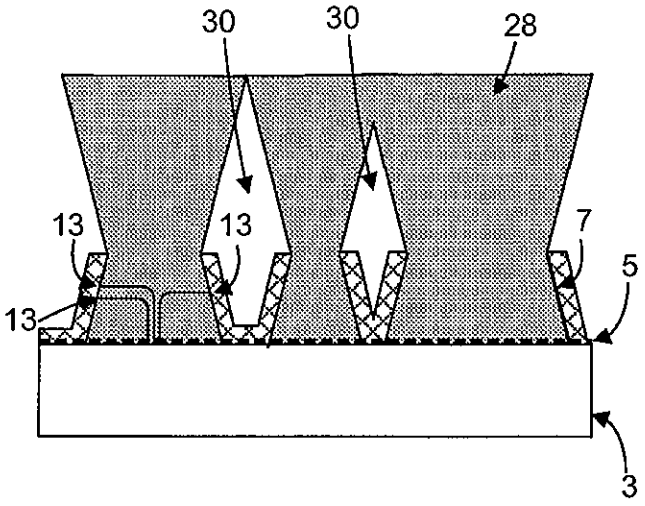


Fig. 5C

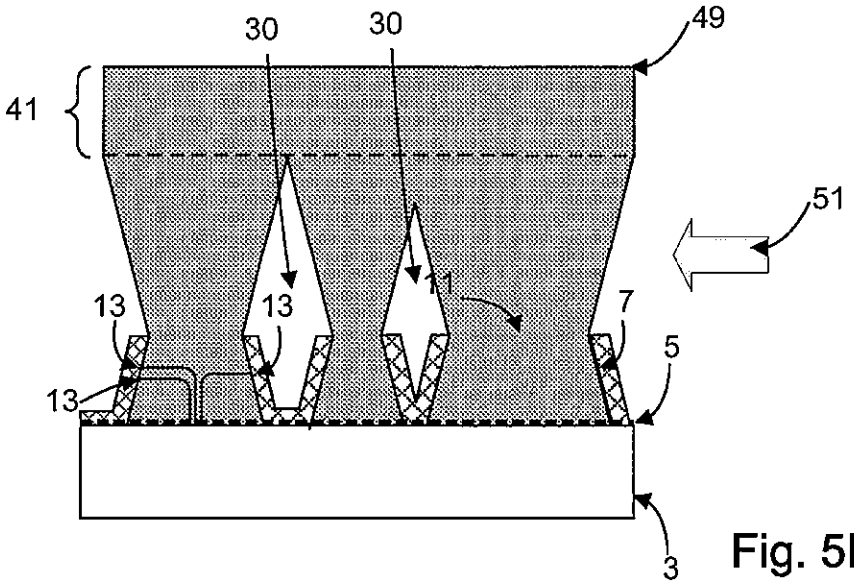


Fig. 5D

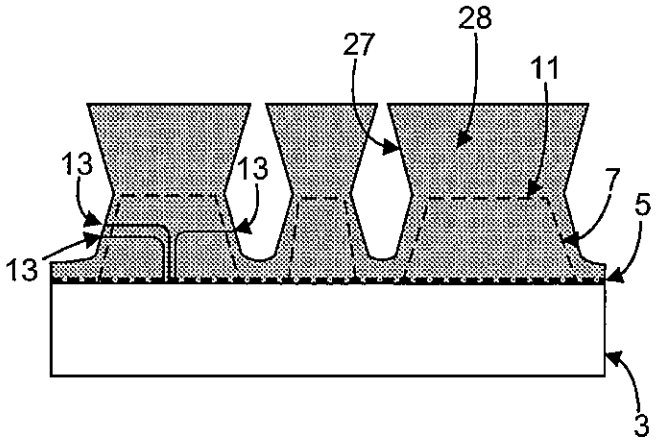


Fig. 6A

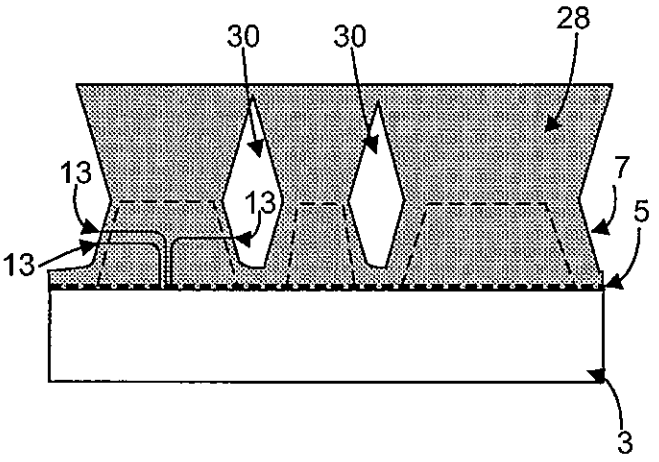


Fig. 6B

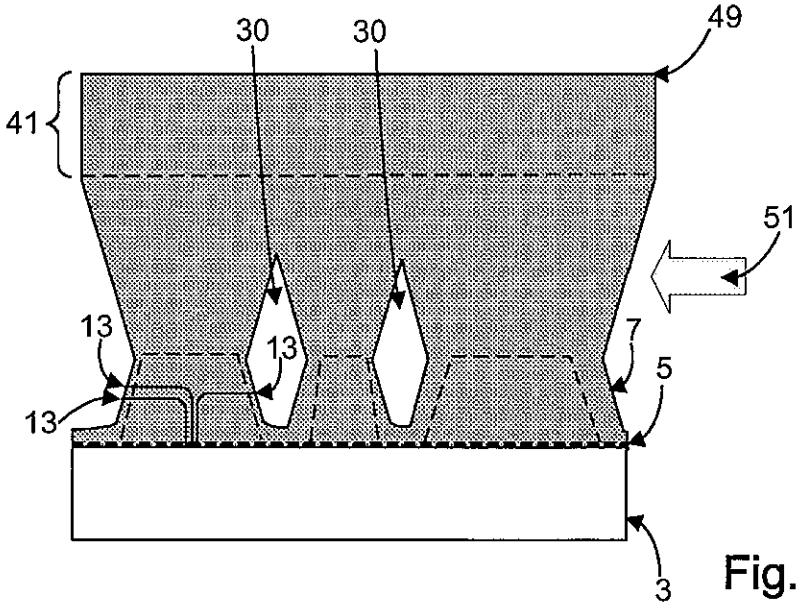


Fig. 6C

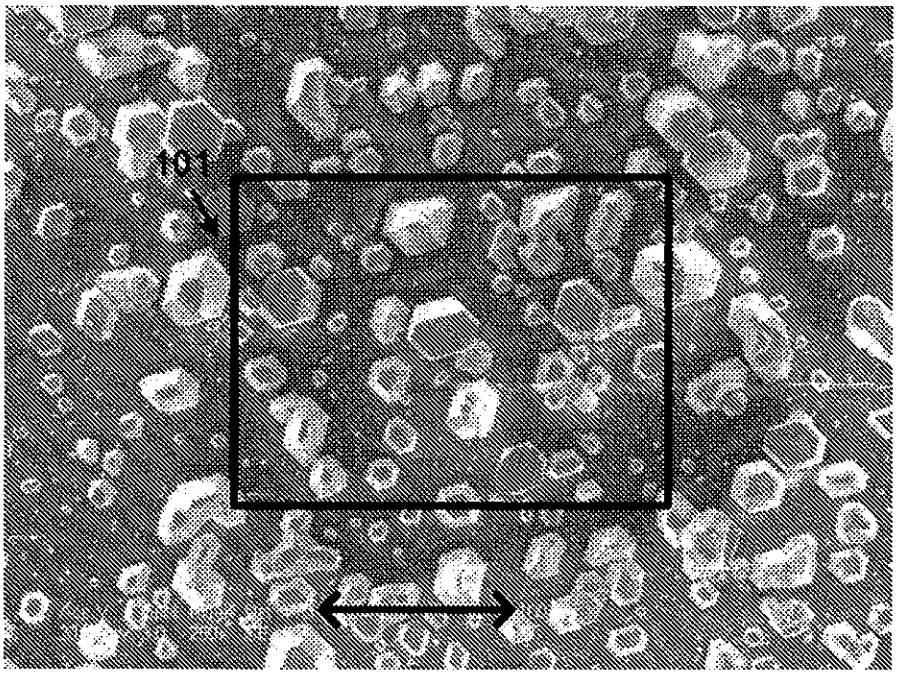


FIG. 7A

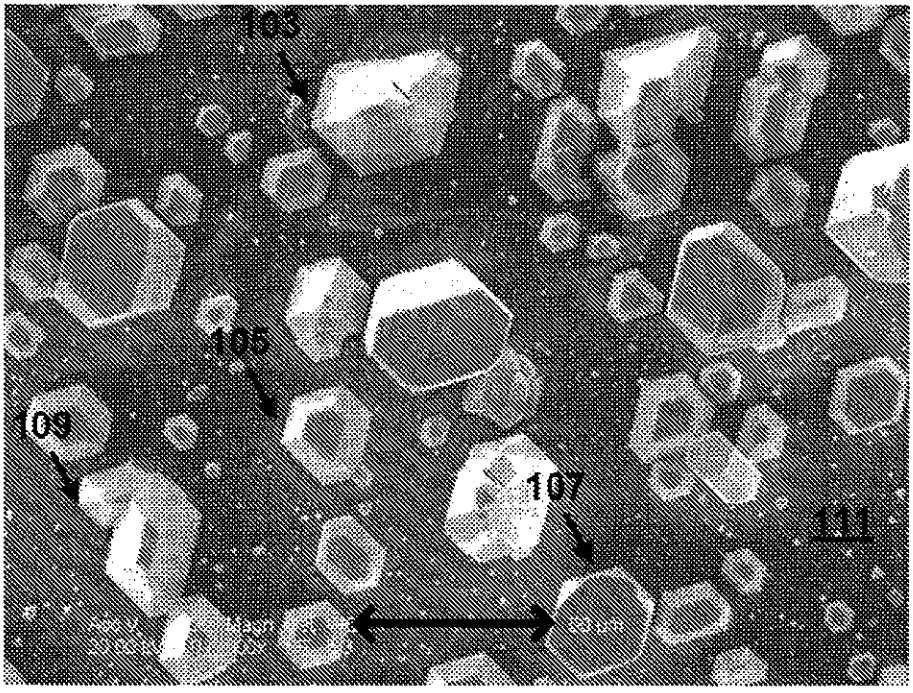


FIG. 7B



FIG. 7C

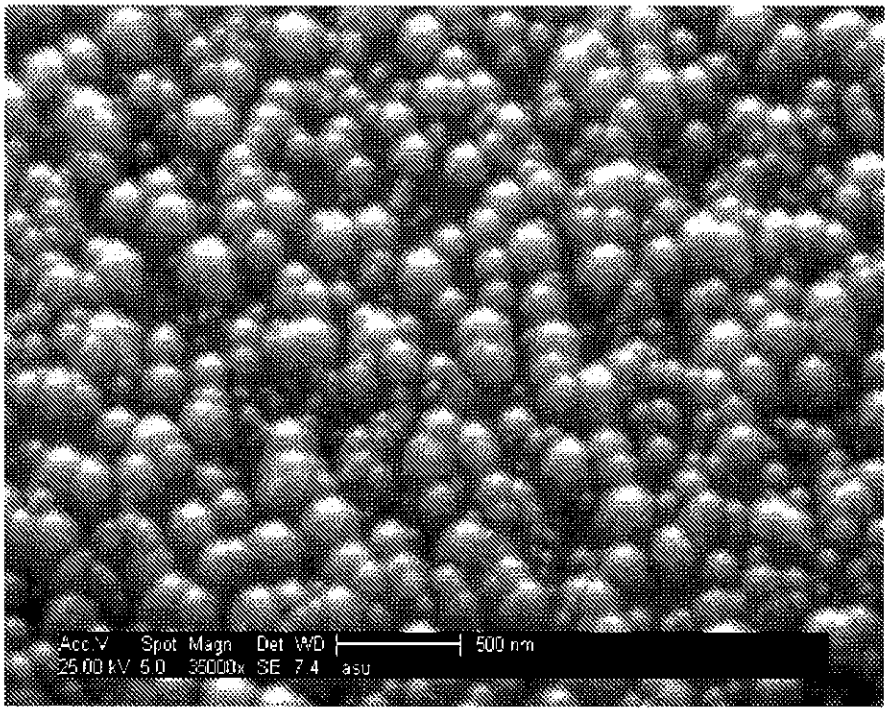


FIG. 8