

This Class 216 is considered to be an integral part of Class 156 (see the Class 156 schedule for the position of this Class in schedule hierarchy). This Class retains all pertinent definitions and class lines of Class 156.

<p>2        <b>ETCHING OF SEMICONDUCTOR MATERIAL TO PRODUCE AN ARTICLE HAVING A NONELECTRICAL FUNCTION</b></p> <p>3        <b>FORMING OR TREATING JOSEPHSON JUNCTION ARTICLE</b></p> <p>4        <b>FORMING OR TREATING A SIGN OR MATERIAL USEFUL IN A SIGN</b></p> <p>5        .Sign or material is           electroluminescent</p> <p>6        <b>FORMING OR TREATING MATERIAL USEFUL IN A CAPACITOR</b></p> <p>7        <b>FORMING OR TREATING FIBROUS ARTICLE OR FIBER REINFORCED COMPOSITE STRUCTURE</b></p> <p>8        <b>FORMING OR TREATING CYLINDRICAL OR TUBULAR ARTICLE HAVING PATTERN OR DESIGN ON ITS SURFACE</b></p> <p>9        .Forming or treating an embossing cylinder or tubular article</p> <p>10       .Forming or treating liquid transfer cylinder or tubular article (e.g., printing roll, etc.)</p> <p>11       <b>FORMING OR TREATING AN ARTICLE WHOSE FINAL CONFIGURATION HAS A PROJECTION</b></p> <p>12       <b>FORMING OR TREATING MASK USED FOR ITS NONETCHING FUNCTION (E.G., SHADOW MASK, X-RAY MASK, ETC.)</b></p> <p>13       <b>FORMING OR TREATING ELECTRICAL CONDUCTOR ARTICLE (E.G., CIRCUIT, ETC.)</b></p> <p>14       .Forming or treating lead frame or beam lead</p> <p>15       .Forming or treating a crossover</p> <p>16       .Forming or treating resistive material</p> <p>17       .Forming or treating of groove or through hole</p> <p>18       ..Filling or coating of groove or through hole with a conductor to form an electrical interconnection</p>	<p>19       ..Filling or coating of groove or through hole in a conductor with an insulator</p> <p>20       .Adhesive or autogenous bonding of self-sustaining preforms (e.g., prefabricated base, etc.)</p> <p>21       .Repairing circuit</p> <p>22       <b>FORMING OR TREATING ARTICLE CONTAINING MAGNETICALLY RESPONSIVE MATERIAL</b></p> <p>23       <b>FORMING OR TREATING ARTICLE CONTAINING A LIQUID CRYSTAL MATERIAL</b></p> <p>24       <b>FORMING OR TREATING OPTICAL ARTICLE</b></p> <p>25       .Phosphor screen</p> <p>26       .Lens</p> <p>27       <b>FORMING OR TREATING THERMAL INK JET ARTICLE (E.G., PRINT HEAD, LIQUID JET RECORDING HEAD, ETC.)</b></p> <p>28       <b>FORMING OR TREATING AN ORNAMENTED ARTICLE</b></p> <p>29       .Wood surface treated or wood grain produced</p> <p>30       .Treating stone (e.g., marble, etc.)</p> <p>31       .Treating glass (e.g., mirror, etc.)</p> <p>32       .Treating elemental metal or alloy thereof</p> <p>33       <b>ADHESIVE OR AUTOGENOUS BONDING OF TWO OR MORE SELF-SUSTAINING PREFORMS WHEREIN AT LEAST TWO OF THE PREFORMS ARE NOT INTENDED TO BE REMOVED (E.G., PREFABRICATED BASE, ETC.)</b></p> <p>34       .Etching improves or promotes adherence of preforms being bonded</p> <p>35       ..Bonding of preform of metal or an alloy thereof to a preform of a nonmetal</p> <p>36       .Removing at least one of the self-sustaining preforms or a portion thereof</p> <p>37       <b>ETCHING AND COATING OCCUR IN THE SAME PROCESSING CHAMBER</b></p> <p>38       <b>PLANARIZING A NONPLANAR SURFACE</b></p> <p>39       <b>FORMING GROOVE OR HOLE IN A SUBSTRATE WHICH IS SUBSEQUENTLY FILLED OR COATED</b></p>
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40	<b>FORMING PATTERN USING LIFT OFF TECHNIQUE</b>	65	..Using laser
41	<b>MASKING OF A SUBSTRATE USING MATERIAL RESISTANT TO AN ETCHANT (I.E., ETCH RESIST)</b>	66	..Using ion beam, ultraviolet, or visible light
42	.Resist material applied in particulate form or spray	67	..Using plasma
43	.Adhesively bonding resist to substrate	68	...Using coil to generate the plasma
44	.Mechanically forming pattern into a resist	69	...Using microwave to generate the plasma
45	.Mask is reusable (i.e., stencil)	70	...Magnetically enhancing the plasma
46	.Masking of sidewall	71	...Specific configuration of electrodes to generate the plasma
47	.Mask is multilayer resist	72	.Etching a multiple layered substrate where the etching condition used produces a different etching rate or characteristic between at least two of the layers of the substrate
48	.Mask is exposed to nonimaging radiation	73	.Etching vapor produced by evaporation, boiling, or sublimation
49	.Mask resist contains organic compound	74	.Etching inorganic substrate
50	..Mask resist contains a color imparting agent	75	..Substrate contains elemental metal, alloy thereof, or metal compound
51	.Mask resist contains inorganic material	76	...Etching of substrate containing at least one compound having at least one oxygen atom and at least one metal atom
52	<b>MECHANICALLY SHAPING, DEFORMING, OR ABRADING OF SUBSTRATE</b>	77	...Etching of substrate containing elemental aluminum, or an alloy or compound thereof
53	.Nongaseous phase etching	78	...Etching of substrate containing elemental copper, or an alloy or compound thereof
54	<b>PATTERN OR DESIGN APPLIED BY TRANSFER</b>	79	..Etching silicon containing substrate
55	<b>HEATING OR BAKING OF SUBSTRATE PRIOR TO ETCHING TO CHANGE THE CHEMICAL PROPERTIES OF SUBSTRATE TOWARD THE ETCHANT</b>	80	...Silicon containing substrate is glass
56	<b>ETCHING TO PRODUCE POROUS OR PERFORATED ARTICLE</b>	81	..Etching elemental carbon containing substrate
57	<b>GAS PHASE AND NONGASEOUS PHASE ETCHING ON THE SAME SUBSTRATE</b>	83	<b>NONGASEOUS PHASE ETCHING OF SUBSTRATE</b>
58	<b>GAS PHASE ETCHING OF SUBSTRATE</b>	84	.With measuring, testing, or inspecting
59	.With measuring, testing, or inspecting	85	..By optical means or of an optical property
60	..By optical means or of an optical property	86	..By electrical means or of an electrical property
61	..By electrical means or of an electrical property		
62	.Irradiating, ion implanting, alloying, diffusing, or chemically reacting the substrate prior to etching to change properties of substrate toward the etchant		
63	.Application of energy to the gaseous etchant or to the substrate being etched		
64	..Etchant is devoid of chlorocarbon or fluorocarbon compound (e.g., C.F.C., etc.)		

87 .Irradiating, ion implanting, alloying, diffusing, or chemically reacting the substrate prior to etching to change properties of substrate toward the etchant

88 .Using film of etchant between a stationary surface and a moving surface (e.g., chemical lapping, etc.)

89 ..Etchant contains solid particle (e.g., abrasive for polishing, etc.)

90 .Relative movement between the substrate and a confined pool of etchant

91 ..Rotating, repeated dipping, or advancing movement of substrate

92 .Projecting etchant against a moving substrate or controlling the angle or pattern projection of the etchant or controlling the angle or pattern of movement of the substrate

93 .Recycling, regenerating, or rejuvenating etchant

94 .Etching using radiation (e.g., laser, electron-beam, ion-beam, etc.)

95 .Substrate is multilayered

96 .Etching inorganic substrate

97 ..Substrate is glass

98 ...Frosting glass

99 ..Substrate contains silicon or silicon compound

100 ..Substrate contains elemental metal, alloy thereof, or metal compound

101 ...Etching of a compound containing at least one oxygen atom and at least one metal atom

102 ..Metal is elemental aluminum, an alloy, or compound thereof

103 ....Etchant contains acid

104 .....Etchant contains fluoride ion

105 ..Metal is elemental copper, an alloy, or compound thereof

106 ....Etchant contains acid

107 .....Etchant contains fluoride ion

108 ...Etchant contains acid

109 ....Etchant contains fluoride ion

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