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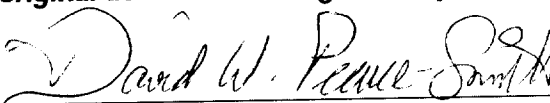
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## EXHIBIT A

Patent	Issued	Title
1. US 4283316	08/11/1981	Surface modification of alumina hydrate with liquid fatty acids
2. US 4286985	09/01/1981	Vortex melting system
3. US 4290874	09/22/1981	Gasket for sealing joints in carbonaceous elements in electrolysis cell
4. US 4292496	09/29/1981	Vertical plate welding using double bevel joint
5. US 4297778	11/03/1981	Method and apparatus for removing liners from metal closures
6. US 4299619	11/10/1981	Energy efficient production of aluminum by carbothermic reduction of alumina
7. US 4299683	11/10/1981	Apparatus and method for efficient transfer of powdered ore
8. US 4301138	11/17/1981	System for transporting particulate solids from high temperature to low temperature zone
9. US 4301563	11/24/1981	Method for roll pointing a threaded screw
10. US 4304611	12/08/1981	Method and apparatus for cleaning container closures
11. US 4305816	12/15/1981	Apparatus and Method for Inspecting Containers
12. US 4308113	12/29/1981	Process for producing aluminum using graphite electrodes having reduced wear rates
13. US 4308114	12/29/1981	Electrolytic production of aluminum using a composite cathode
14. US 4308115	12/29/1981	Method of producing aluminum using graphite cathode coated with refractory hard metal
15. US 4312695	01/26/1982	Method and apparatus for everting a closure and separating a liner therefrom
16. US 4312849	01/26/1982	Phosphorous removal in silicon purification
17. US 4318275	03/09/1982	Atmospheric thermal energy conversion system
18. US 4319728	03/16/1982	Liquified gas cylinder anti-rotation device
19. US 4319885	03/16/1982	Coal fuel mixture resulting in reduced sulfurous pollutants
20. US 4326662	04/27/1982	Process of ultrasonically soldering drawn aluminum tubing products
21. US 4333803	06/08/1982	Method and apparatus for controlling the heat balance in aluminum reduction cells
22. US 4339316	07/13/1982	Intermediate layer for seating RHM tubes in cathode blocks
23. US 4341498	07/27/1982	Method and apparatus for blanking, folding and inserting membrane into container covercap
24. US 4348236	09/07/1982	Composition for castable refractory block
25. US 4349420	09/14/1982	Fractional distillation process for the production of aluminum chloride
26. US 4356271	10/26/1982	Noncollapsible ceramic foam
27. US 4359530	11/16/1982	Protein extraction from green crops
28. US 4359532	11/16/1982	Method for glucose extraction from green crops
29. US 4360539	11/23/1982	Method for increasing resistance to treeing in polymeric insulating layer
30. US 4362352	12/07/1982	Splicing device
31. US 4363611	10/30/1980	Apparatus for Hydrostatic Extrusion of Thermoplastic
32. US 4364255	10/20/1980	Controlled Oriented Discharge of Cups from a Blanking and
33. US 4364858	12/21/1982	Method of producing an activated alumina Claus catalyst
34. US 4368074	01/11/1983	Method of producing a high temperature metal powder component
35. US 4369234	01/18/1983	Electromechanical Power Generation
36. US 4374050	02/15/1983	Inert electrode compositions
37. US 4374761	02/22/1983	Inert electrode formulations
38. US 4377084	02/22/1983	Press apparatus having resilient stop blocks
39. US 4378894	04/05/1983	Tamper-evident closure
40. US 4379719	04/12/1983	Aluminum powder alloy product for high temperature application
41. US 4384888	05/24/1983	Treating molten aluminum
42. US 4390653	06/28/1983	Flame-retardant filled polypropylene compound with improved flow properties
43. US 4394242	07/19/1983	Anode Mount

44. US 4396482	08/02/1983	Composite cathode
45. US 4399008	08/16/1983	Composition for inert electrodes
46. US 4406717	09/27/1983	Wrought aluminum base alloy product having refined Al-Fe type intermetallic phases
47. US 4410403	10/18/1983	Electrolysis method
48. US 4412870	11/01/1983	Wrought aluminum base alloy products having refined intermetallic phases and method
49. US 4416954	08/13/1983	Improved Aging Process for 7000 Series Aluminum Base Alloys
50. US 4428800	01/31/1984	Measurement of gaseous fluoride concentration using an internal reference solution
51. US 4431467	02/14/1984	Aging process for 7000 series aluminum base alloys
52. US 4449902	05/22/1984	Apparatus for control of particle size in the production of atomized metal
53. US 4455211	06/19/1984	Composition suitable for inert electrode
54. US 4457881	07/03/1984	Method for collection of atomized metal particles
55. US 4464103	08/07/1984	Apparatus for the production of atomized metal particles
56. US 4464199	08/07/1984	Aluminum powder alloy product for high temperature application
57. US 4464347	08/07/1984	Recovery of aluminum from spent liquor
58. US 4465205	08/14/1984	Pulltab for easy open end
59. US 4466786	08/21/1984	Apparatus for production of atomized powder
60. US 4468182	08/28/1984	Apparatus for control of powder production
61. US 4468183	08/28/1984	Apparatus for the production of particulate metal
62. US 4468847	09/04/1984	Method of segregating metallic components
63. US 4470307	09/11/1984	Sonic system inspection control
64. US 4474225	10/02/1984	Method of direct chill casting
65. US 4477292	10/16/1984	Three-step aging to obtain high strength and corrosion resistance in Al-Zn-Mg-Cu alloys
66. US 4478600	10/23/1984	Process for recovery of aluminum chloride
67. US 4478637	10/23/1984	Thermal reduction process for production of magnesium
68. US 4498927	02/12/1985	Thermal reduction process for production of magnesium using aluminum skim as a reductant
69. US 4499193	02/12/1985	Process for producing beta'-silicon aluminum oxynitride (B'-SiAlON) using discrete particles
70. US 4491473	01/01/1985	Method of Operating metallic scrap treating furnace
71. US 4499734	02/19/1985	Power generation apparatus and method
72. US 4510033	04/09/1985	Frozen electrolyte bath removal apparatus
73. US 4511666	04/16/1985	Process for producing beta'-silicon aluminum oxynitride (B'-SiAlON)
74. US 4530631	07/23/1985	Pull tab for easy open can end method
75. US 4530699	07/23/1985	Dense phase precipitation
76. US 4531392	07/30/1985	Phase compensator for gauge control using estimate of roll eccentricity
77. US 4534266	08/13/1985	Composite armour plating
78. US 4552638	11/12/1985	Electrode assembly having improved current distribution for use in an electrolytic reduction cell
79. US 4554222	11/19/1985	Metal consuming power generation apparatus
80. US 4554402	11/19/1985	Vibration damper for overhead conductor
81. US 4556468	12/03/1985	Electrolytic cell
82. US 4563895	01/14/1986	Apparatus and method for ultrasonic detection of inclusions in molten metals
83. US 4567993	02/04/1986	Tamper-evident closure
84. US 4576767	03/18/1986	Method for controlling powder production
85. US 4579839	04/01/1986	Rehydration bondable alumina
86. US 4580692	04/08/1986	Container sealing cap

87. US 4582585	04/15/1986	Inert electrode composition having agent for controlling oxide growth on electrode made therefrom
88. US 4584172	04/22/1986	Method of making composition suitable for use as inert electrode having good electrical conductivity and mechanical properties
89. US 4584862	04/29/1986	Rolling procedures for eliminating alligator defect formation
90. US 4585565	04/29/1986	Metalworking lubricant comprising mineral oil and alkoxyalkyl ester
91. US 4585601	04/29/1986	Method for controlling the production of atomized powder
92. US 4585645	04/29/1986	Alpha alumina production in a steam-fluidized reactor
93. US 4589932	05/20/1986	Aluminum 6XXX alloy products of high strength and toughness having stable response to high temperature artificial aging treatments and method for producing
94. US 4592511	06/03/1986	Method of segregating metallic components and removing fines therefrom
95. US 4593551	06/10/1986	Rolling procedures for alligator defect elimination
96. US 4597919	07/01/1986	Process for the production of particulate metal
97. US 4599846	07/15/1986	Capping head
98. US 4610156	09/09/1986	Progressive die apparatus having resilient tool support
99. US 4618441	10/21/1986	Metalworking with a lubricant composition comprising mineral oil and alkoxyalkyl ester
100. US 4620905	11/04/1986	Electrolytic production of metals using a resistant anode
101. US 4621523	11/11/1986	Rapid determination of metal strength from hardness tests
102. US 4629517	12/16/1986	High strength and corrosion resistant aluminum article and method
103. US 4634469	01/06/1987	Parting composition comprising glycerol trioleate, castor oil and copper corrosion inhibitor
104. US 4643080	02/17/1987	Roof ridge ventilator system
105. US 4645582	02/24/1987	Current distribution assembly for electrode used in an electrolytic reduction cell
106. US 4648257	03/10/1987	Rolling mill eccentricity compensation using actual
107. US 4656156	04/07/1987	Adsorbent and substrate products and method of producing same
108. US 4656854	04/14/1987	Rolling mill eccentricity compensation using measurement of sheet tension
109. US 4662215	05/05/1987	Apparatus and method for ultrasonic detection of inclusions in a molten body
110. US 4664760	05/12/1987	Electrolytic cell and method of electrolysis using supported electrodes
111. US 4674264	06/23/1987	Screw capping head with a hysteresis clutch
112. US 4675730	06/23/1987	Video surface inspection system
113. US 4678477	07/07/1987	Process for lowering level of contaminants in Bayer liquor by membrane filtration
114. US 4678760	07/07/1987	Method of forming a substantially interwoven matrix containing a refractory hard metal and a metal compound
115. US 4685322	08/11/1987	Method of forming a drawn and redrawn container body
116. US 4685325	08/11/1987	Measurement of gas content in molten metal using a constant current source
117. US 4704886	11/10/1987	Stretch-forming process
118. US 4709740	12/01/1987	Direct chill casting of aluminum-lithium alloys
119. US 4709747	12/01/1987	Process and apparatus for reducing macrosegregation adjacent to a longitudinal centerline of a solidified body
120. US 4711673	12/08/1987	Combination of surface modifiers for powdered inorganic fillers
121. US 4714494	12/22/1987	Trough shear diffusor apparatus for fluxing molten metal and method
122. US 4715901	12/29/1987	Architectural product
123. US 4717692	01/05/1988	Composites comprising one or more interwoven matrix compositions each containing a refractory hard metal and method of forming same
124. US 4724887	02/16/1988	Direct chill casting of lithium-containing alloys

125.US 4724896	02/16/1988	Apparatus and method for improving the surface characteristics of continuously cast metal ingot
126.US 4735773	04/05/1988	Inertial mixing method for mixing together molten metal streams
127.US 4735922	04/05/1988	Porous refractory hard metal compositions and method of forming same
128.US 4737247	04/12/1988	Inert anode stable cathode assembly
129.US 4751211	06/14/1988	Composite adsorbent for removing acids from organophosphate functional fluids
130.US 4752397	06/21/1988	Process for removing heavy metal ions from solutions using adsorbents containing activated hydrotalcite
131.US 4755374	07/05/1988	Aluminum hydroxide production
132.US 4758316	07/19/1988	Aluminum-lithium scrap recovery
133.US 4760729	08/02/1988	Dual Ram Press
134.US 4762537	08/09/1988	Adsorbent for HCl comprising alumina and acid-treated Y zeolite
135.US 4769158	09/06/1988	Molten metal filtration system using continuous media filter
136.US 4770869	09/13/1988	Steam producing process and products
137.US 4773470	09/27/1988	Casting aluminum alloys with a mold header comprising delaminated vermiculite
138.US 4774210	09/27/1988	Densification aid for aluminum borate products
139.US 4775418	10/04/1988	Parting composition comprising glycerol trioleate and vegetable oil
140.US 4778533	10/18/1988	Aluminum-magnesium alloy sheet product and method for inhibiting formation of a film thereon
141.US 4779442	10/25/1988	Method and apparatus for measuring forces on a workpiece during drawing or ironing
142.US 4781357	11/01/1988	Tap plug apparatus
143.US 4781982	11/01/1988	Surface treating mineral particles to reduce halide adsorption
144.US 4783417	11/08/1988	System for on-line molten metal analysis
145.US 4784603	11/15/1988	Process for removing volatiles from metal
146.US 4784921	11/15/1988	Aluminum alloy automotive material
147.US 4788841	12/06/1988	Method and apparatus for making step wall tubing
148.US 4789422	12/06/1988	Aluminum borate fibers
149.US 4789514	12/06/1988	Methods of producing biaxially oriented polymer sheet
150.US 4795502	01/03/1989	Aluminum-lithium alloy products and method of making the same
151.US 4795735	01/03/1989	Activated carbon/alumina composite
152.US 4797165	01/10/1989	Aluminum-lithium alloys having improved corrosion resistance and method
153.US 4806174	02/21/1989	Aluminum-lithium alloys and method of making the same
154.US 4808498	02/28/1989	Aluminum alloy and associated anode
155.US 4808742	02/28/1989	Method for removing acids from organophosphate functional fluids
156.US 4811582	03/14/1989	Strain rate control of superplastic forming
157.US 4812183	03/14/1989	Coated sheet stock
158.US 4814050	03/21/1989	Estimation and control of alumina concentration in hall cells
159.US 4814240	03/21/1989	Metal-consuming power generation methods
160.US 4818300	04/04/1989	Method for making lithoplate
161.US 4821546	04/18/1989	Two-step superplastic forming method
162.US 4822592	04/18/1989	Producing alpha alumina particles with pressurized acidic steam
163.US 4822593	04/18/1989	Control of form of crystal precipitation of aluminum hydroxide using cosolvents and varying caustic concentration
164.US 4823537	04/25/1989	Method of forming a pilferproof closure
165.US 4824576	04/25/1989	Process for removal, separation and recovery of heavy metal ions from solutions using activated alumina including acid treated activated alumina
166.US 4832758	05/23/1989	Producing combined high strength and high corrosion resistance in Al-Zn-MG-CU alloys

167.US 4835124	05/30/1989	Alumina ceramic product from colloidal alumina
168.US 4835338	05/30/1989	Process for removal of carbonyl sulfide from organic liquid by adsorption using alumina adsorbent capable of regeneration
169.US 4836398	06/06/1989	Inwardly reformable endwall for a container
170.US 4840852	06/20/1989	Aluminum alloy vehicular member
171.US 4842964	06/27/1989	In-situ electrolyte storage for batteries
172.US 4844750	07/04/1989	Aluminum-lithium alloys
173.US 4847064	07/11/1989	Economical process for alpha alumina production
174.US 4848647	07/18/1989	Aluminum base copper-lithium-magnesium welding alloy for welding aluminum lithium alloys
175.US 4861391	08/29/1989	Aluminum alloy two-step aging method and article
176.US 4863528	09/05/1989	Aluminum alloy product having improved combinations of strength and corrosion resistance properties and method for producing the same
177.US 4865506	09/12/1989	Apparatus for reforming an end shell
178.US 4867882	09/19/1989	Method for reducing the amount of anionic metal ligand complex in a solution
179.US 4871711	10/03/1989	Active material produced from metal oxide/hydroxide particles and phosphate esters
180.US 4874440	10/17/1989	Superplastic aluminum products and alloys
181.US 4874657	10/17/1989	Methods of producing biaxially oriented polymer product and
182.US 4877393	10/31/1989	Apparatus for producing biaxially oriented polymer sheet
183.US 4882831	11/28/1989	Method of producing aircraft plate and sheet
184.US 4898624	02/06/1990	High performance Ti-6Al-4V forgings
185.US 4900537	02/13/1990	Control of form of crystal precipitation of a al hydroxide
186.US 4900637	02/13/1990	Tag for labeling an article cast from molten material, method therefore and article
187.US 4902353	02/20/1990	Method for making lithoplate
188.US 4904634	02/27/1990	Active material useful as adsorbent comprising metal oxide/hydroxide surfaces reacted with one or more phosphorous-containing materials having selected organic radicals attached thereto
189.US 4905491	03/06/1990	Unwind/rewind eccentricity control for rolling mills
190.US 4905914	03/06/1990	Method of segregating metallic components and impurities
191.US 4913935	04/03/1990	Polymer coated alumina
192.US 4915747	04/10/1990	Aluminum-lithium alloys and process therefor
193.US 4915930	04/10/1990	Process for producing aluminum hydroxide of improved whiteness
194.US 4921548	05/01/1990	Aluminum-lithium alloys and method of making same
195.US 4925390	05/15/1990	Apparatus for retaining the configuration of an aperture formed through a coil
196.US 4927470	05/22/1990	Thin gauge aluminum plate product by isothermal treatment and ramp anneal
197.US 4929589	05/29/1990	Metal oxide/hydroxide particles coated with phosphate esters
198.US 4935146	06/19/1990	Method for removing arsenic or selenium from an aqueous solution containing a substantial background of another contaminant
199.US 4936128	06/26/1990	Control of cavitation in superplastic forming through use of acoustic emission
200.US 4939032	07/03/1990	Composite materials having improved fracture toughness
201.US 4943426	07/24/1990	Method for regulating reaction temperature
202.US 4946517	08/07/1990	Unrecrystallized aluminum plate product by ramp annealing
203.US 4947667	08/14/1990	Method and apparatus for reforming a container
204.US 4950560	08/21/1990	Aluminum alloy and associated anode and battery
205.US 4954188	09/04/1990	High strength aluminum alloy resistant to exfoliation and method of making
206.US 4957890	09/18/1990	Surface treated permeable inorganic membranes and method of

		making same
207.US 4960163	10/02/1990	Fine grain casting by mechanical stirring
208.US 4961792	10/09/1990	Aluminum-lithium alloys having improved corrosion resistance containing Mg and Zn
209.US 4962073	10/09/1990	Surface treated porous ceramic membranes and method of making same
210.US 4967538	11/06/1990	Inwardly reformable endwall for a container and a method of packaging a product in the container
211.US 4970181	11/13/1990	Process for producing ceramic shapes
212.US 4970886	11/20/1990	Stretch shaping method and apparatus
213.US 4975125	12/04/1990	Titanium alpha-beta alloy fabricated material and process for preparation
214.US 4977113	12/11/1990	Process for producing silicon aluminum oxynitride by carbothermic reaction
215.US 4983216	01/08/1991	Aluminum scrap melting
216.US 4987950	01/29/1991	Method and apparatus for controlling the heat transfer of liquid coolant in continuous casting
217.US 4988230	01/29/1991	Extruded node
218.US 4988394	01/29/1991	Method of producing unrecrystallized thin gauge aluminum products by heat treating and further working
219.US 4991735	02/12/1991	Pressure resistant end shell for a container and method and apparatus for forming the same
220.US 5013336	05/07/1991	Method and apparatus for emission control
221.US 5020350	06/04/1991	Apparatus and method for lubricating and cooling in a draw and iron press
222.US 5022207	06/11/1991	Building panel having locking flange and locking receptacle
223.US 5024822	06/18/1991	Stabilization of fluorides of spent potlining by chemical dispersion
224.US 5028276	07/02/1991	Method for making lithoplate having improved grainability
225.US 5032171	07/16/1991	Aluminum scrap recovery by inductively moving molten metal
226.US 5032237	07/16/1991	Anodic phosphonic/phosphinic acid duplex coating on valve metal surface
227.US 5039634	08/13/1991	Molten aluminum resistant refractory composition containing ceramic fibers
228.US 5055199	10/08/1991	Method for reducing the amount of anionic metal-ligand complex in a solution
229.US 5055255	10/08/1991	Aluminum alloy suitable for pistons
230.US 5058408	10/22/1991	Method for partially annealing the sidewall of a container
231.US 5059056	10/22/1991	Extruded node
232.US 5061327	10/29/1991	Method of producing unrecrystallized aluminum products by heat treating and further working
233.US 5066342	11/19/1991	Aluminum-lithium alloys and method of making the same
234.US 5068095	11/26/1991	Method for reducing the amount of colorants in a caustic liquor
235.US 5075089	12/24/1991	Method of making pillared hydrotalcites and associated products
236.US 5076344	12/31/1991	Die-casting process and equipment
237.US 5093092	03/03/1992	Purification of bayer process liquor with alumina coated with a layer or carbon
238.US 5102507	04/07/1992	Method of making an anodic phosphate ester duplex coating on a valve metal surface
239.US 5103550	04/14/1992	Method of making a food or beverage container
240.US 5108519	04/28/1992	Aluminum-lithium alloys suitable for forgings
241.US 5108520	04/28/1992	Heat treatment of precipitation hardening alloys
242.US 5108967	04/28/1992	Process for producing nonequiaxed silicon aluminum oxynitride
243.US 5110553	05/05/1992	Automatic sample preparation for analysis of sample particles
244.US 5114472	05/19/1992	Multistage rigid media filter for molten metal and method of filtering



245.US 5119924	06/09/1992	Article feeding apparatus
246.US 5122184	06/16/1992	Molten salt coalescence in molten aluminum
247.US 5123973	06/23/1992	Aluminum alloy extrusion and method of producing
248.US 5124022	06/23/1992	Electrolytic capacitor and method of making same
249.US 5124191	06/23/1992	Structural panel
250.US 5124289	06/23/1992	Surface treated permeable inorganic membranes and process of making same
251.US 5126210	06/30/1992	Anodic phosphonic/phosphinic acid duplex coating on valve metal surface
252.US 5131987	07/21/1992	Process for making an adhesively bonded aluminum article
253.US 5132181	07/21/1992	Phosphonic/phosphinic acid bonded to aluminum hydroxide layer
254.US 5133401	07/28/1992	Continuous casting machine with mold block assemblies interlinked by elastic hinges
255.US 5135713	08/04/1992	Aluminum-lithium alloys having high zinc
256.US 5137686	08/11/1992	Aluminum-lithium alloys
257.US 5141734	08/25/1992	Steam producing process
258.US 5141899	08/25/1992	Low dielectric inorganic composition for multilayer ceramic package containing titanium silicate glass and crystal inhibitor
259.US 5148853	09/22/1992	Method and apparatus for controlling the heat transfer of liquid coolant in continuous casting
260.US 5149238	09/22/1992	Pressure Resistant Sheet Metal End Enclosure
261.US 5149301	09/22/1992	Baffle means for roof ridge ventilator
262.US 5149520	09/22/1992	Small sized alpha alumina particles and platelets
263.US 5154780	10/13/1992	Metallurgical products improved by deformation processing and method thereof
264.US 5157897	10/27/1992	Rotary capping machine
265.US 5160574	11/03/1992	Process for production of small diameter titanium carbide whiskers
266.US 5162065	11/10/1992	Aluminum alloy suitable for pistons
267.US 5171631	12/15/1992	Spacer/extender for titanium dioxide in pigment systems for coatings
268.US 5173134	12/22/1992	Processing alpha-beta titanium alloys by beta as well as alpha plus beta forging
269.US 5176033	01/05/1993	Method of determining the presence of anisotropic structures in the interior of as formed metal
270.US 5176362	01/05/1993	Vehicle jack assembly
271.US 5176763	01/05/1993	Method for making lithoplate having improved grainability
272.US 5177034	01/05/1993	Gallium crystal growth inhibitor for glassy low dielectric inorganic composition
273.US 5182410	01/26/1993	Organo-aluminum hydroxide compounds
274.US 5186767	02/16/1993	Lithoplate and method for making same
275.US 5186790	02/16/1993	Chemical milling of aluminum-lithium alloys
276.US 5187046	02/16/1993	Arc-grained lithoplate
277.US 5192378	03/09/1993	Aluminum alloy sheet for food and beverage containers
278.US 5192843	03/09/1993	Pin attachment tool and method of capacitive brazing
279.US 5194102	03/16/1993	Method for increasing the strength of aluminum alloy products through warm working
280.US 5194202	03/16/1993	Formation of ceramic-metal composite by pressure casting and oxidation sintering
281.US 5194243	03/16/1993	Production of aluminum compound
282.US 5198200	03/30/1993	Process for the recovery of values from secondary aluminum dross
283.US 5206190	04/27/1993	Dielectric composition containing cordierite and glass
284.US 5207968	05/04/1993	Method for making a dimensionally stable green ceramic sheet
285.US 5207974	05/04/1993	Partitioned receptacle for distributing molten metal from a spout to form an ingot
286.US 5213639	05/25/1993	Damage tolerant aluminum alloy products useful for aircraft

		applications such as skin
287.US 5215624	06/01/1993	Milling solution and method
288.US 5219502	06/15/1993	Method for making a thermoplastic stock shape
289.US 5219800	06/15/1993	Colored ceramics for electronic packages
290.US 5221377	06/22/1993	Aluminum alloy product having improved combinations of properties
291.US 5222545	06/29/1993	Method and apparatus for casting a plurality of closely-spaced ingots in a static magnetic field
292.US 5225025	07/06/1993	Apparatus and method for resistance welding
293.US 5225115	07/06/1993	Bromide intercalated hydrotalcite for use as a flame retardant, smoke suppressant additive
294.US 5225229	07/06/1993	Aluminum hydroxide production
295.US 5226950	07/13/1993	Liquid-in-liquid sensor and method
296.US 5226959	07/13/1993	Gallium-containing glassy low dielectric ceramic compositions
297.US 5232042	08/03/1993	Mold for casting metal ingot sows and method
298.US 5233852	08/10/1993	Mill actuator reference adaptation for speed changes
299.US 5234045	08/10/1993	Method of squeeze-casting a complex metal matrix composite in a shell-mold cushioned by molten metal
300.US 5238646	08/24/1993	Method for making a light metal-rare earth metal alloy
301.US 5238715	08/24/1993	Food or beverage container or container panel
302.US 5244745	09/14/1993	Structural sheet and panel
303.US 5246055	09/21/1993	Vacuum die-casting machine with apparatus and method for controlling pressure behind piston
304.US 5246060	09/21/1993	Process for ingot casting employing a magnetic field for reducing macrosegregation and associated apparatus and ingot
305.US 5248386	09/28/1993	Milling solution and method
306.US 5249446	10/05/1993	Process for making an aluminum alloy finstock lubricated by a water-microemulsifiable composition
307.US 5249466	10/05/1993	Ultrasonic transducer for determining if anisotropic structures are present in metal
308.US 5250364	10/05/1993	Rolled product with textured surface for improved lubrication, formability and brightness
309.US 5252655	10/12/1993	Densified ceramic green sheet and stack having conductors therein
310.US 5255731	10/26/1993	Partitioned receptacle for distributing molten metal from a spout to form and ingot
311.US 5256470	10/26/1993	Crystal growth inhibitor for glassy low dielectric inorganic composition
312.US 5259436	11/09/1993	Fabrication of metal matrix composites by vacuum die casting
313.US 5260119	11/09/1993	Low dielectric inorganic composition for multilayer ceramic package
314.US 5264060	11/23/1993	Method for pultruding fiber-reinforced thermoplastic stock
315.US 5270268	12/14/1993	Aluminum borate devitrification inhibitor in low dielectric borosilicate glass
316.US 5272443	12/21/1993	Chatter and profile measuring using capacitor sensors
317.US 5277719	01/11/1994	Aluminum alloy thick plate product and method
318.US 5277788	01/11/1994	Twice-anodized aluminum article having an organo-phosphorus monolayer and process for making the article
319.US 5279715	01/18/1994	Process and apparatus for low temperature electrolysis of oxides
320.US 5284327	02/08/1994	Extrusion quenching apparatus and related method
321.US 5286560	02/15/1994	Method for increasing the wettability of aluminum metal to alumina containing fibers
322.US 5286577	02/15/1994	Drawn conductors for cryogenic applications
323.US 5290424	03/01/1994	Method of making a shaped reflective aluminum strip, doubly-protected with oxide and fluoropolymer coatings
324.US 5293687	03/15/1994	Wheel manufacturing method

325.US 5301129	04/05/1994	Video web inspection system employing filtering and thresholding to determine surface anomalies
326.US 5301708	04/12/1994	Rotary plug valve actuator and associated rotary plug valve and associated method
327.US 5311923	05/17/1994	Supporting and fastening means for mold blocks in a continuous block caster
328.US 5313997	05/24/1994	Tire valve stem stabilizing and supporting device
329.US 5316985	05/31/1994	Suppression of crystal growth in low dielectric inorganic composition using ultrafine alumina
330.US 5323631	06/28/1994	Method for forming a hollow workpiece using a snake tool
331.US 5324587	06/28/1994	Adhesively bonded aluminum
332.US 5327764	07/12/1994	Apparatus and method for the stretch forming of elongated hollow metal sections
333.US 5327765	07/12/1994	Internal articulated mandrel for the stretch forming of elongated hollow metal sections
334.US 5334366	08/02/1994	Transition alumina and method for its production
335.US 5335532	08/09/1994	Body maker apparatus
336.US 5336295	08/09/1994	Method for separation and removal of suspended liquid particles from molten metal and associated apparatus
337.US 5338611	08/16/1994	Method of welding thermoplastic substrates with microwave frequencies
338.US 5341663	08/30/1994	Automatic process control and noise suppression
339.US 5342243	08/30/1994	Universal joint yoke
340.US 5342429	08/30/1994	Purification of molten aluminum using upper and lower impellers
341.US 5342459	08/30/1994	Aluminum alloy extruded and cold worked products having fine grain structure and their manufacture
342.US 5348760	09/20/1994	Surface treated ceramic powders
343.US 5349839	09/27/1994	Flexible constraining apparatus and method for the stretch forming of elongated hollow metal sections
344.US 5353967	10/11/1994	Dry bulk pressure differential container
345.US 5355710	10/18/1994	Method and apparatus for necking a metal container and resultant container
346.US 5360496	11/01/1994	Nickel base alloy forged parts
347.US 5361678	11/08/1994	Coated ceramic bodies in composite armor
348.US 5362340	11/08/1994	Method of producing aluminum can sheet having low earring characteristics
349.US 5362341	11/08/1994	Method of producing aluminum can sheet having high strength and low earring characteristics
350.US 5362457	11/08/1994	Direct synthesis of anion substituted hydrotalcite
351.US 5370171	12/06/1994	Die-casting process and equipment
352.US 5371050	12/06/1994	Aluminum phosphate bonded fiber reinforced composite material containing metal coated fibers
353.US 5373721	12/20/1994	Method and apparatus for scoring metal panels and resultant product
354.US 5373934	12/20/1994	Bottle-gripping insert element
355.US 5374323	12/20/1994	Nickel base alloy forged parts
356.US 5375647	12/27/1994	Process for ingot casting employing a magnetic field for reducing macrosegregation and associated apparatus and ingot
357.US 5377075	12/27/1994	Ballast cradle and retrofit for fluorescent light conversion
358.US 5378264	01/03/1995	Microemulsion formation in offgas scrubbing
359.US 5378325	01/03/1995	Process for low temperature electrolysis of metals in a chloride salt bath
360.US 5378367	01/03/1995	Method for removing color-imparting contaminants from pulp and paper waste streams using a combination of adsorbents
361.US 5383953	01/24/1995	Method of producing magnesium vapor at atmospheric pressure

362.US 5386900	02/07/1995	Adjustable infeed design
363.US 5390827	02/21/1995	Dry bulk pressure differential container with external frame
364.US 5394727	03/07/1995	Method of forming a metal container body
365.US 5397201	03/14/1995	Wall assembly for offshore use
366.US 5399212	03/21/1995	High strength titanium-aluminum alloy having improved fatigue crack growth resistance
367.US 5401575	03/28/1995	Aluminum sheet coated with a lubricant comprising dioctyl sebacate and petrolatum
368.US 5405571	04/11/1995	Tape casting fiber reinforced composite structures
369.US 5407702	04/18/1995	Method for coating a metal strip
370.US 5415742	05/16/1995	Process and apparatus for low temperature electrolysis of oxides
371.US 5417819	05/23/1995	Method for desmutting aluminum alloys having a highly reflective surface
372.US 5427602	06/27/1995	Removal of suspended particles from molten metal
373.US 5429174	07/04/1995	Vacuum die casting machine having improved siphon tube and associated method
374.US 5435110	07/25/1995	Method of joining of hollow framework and associated frame assembly
375.US 5435161	07/25/1995	Extrusion method utilizing variable billet preheat temperature
376.US 5435205	07/25/1995	Pedal mechanism and method for forming the same
377.US 5435373	07/25/1995	Apparatus and method for lubricating and cleaning out die-casting equipment
378.US 5441334	08/15/1995	Customized vehicle wheel and method
379.US 5445807	08/29/1995	Production of aluminum compound
380.US 5447583	09/05/1995	Extrusion quenching apparatus and related method
381.US 5449213	09/12/1995	Movable body panel for a vehicle and related method
382.US 5453110	09/26/1995	Method of gas fluxing with two rotatable dispensers
383.US 5454252	10/03/1995	Can body maker apparatus with flexible redraw sleeve
384.US 5454253	10/03/1995	Reddraw mechanism for can body maker apparatus
385.US 5454254	10/03/1995	Can body maker apparatus with air actuator redraw mechanism
386.US 5462609	10/31/1995	Electric arc method for treating the surface of lithoplate and other metals
387.US 5466050	11/14/1995	Vehicle wheel and associated methods of making a vehicle wheel
388.US 5466317	11/14/1995	Laminated building panel and method for its production
389.US 5470005	11/28/1995	Method of sheet processing using a tension exciter
390.US 5472734	12/05/1995	Apatite coating on aluminum sheet and method of manufacture
391.US 5476134	12/19/1995	CRN coated die-casting tools for casting low aluminum iron alloys and method of making same
392.US 5476725	12/19/1995	Clad metallurgical products and methods of manufacture
393.US 5477912	12/26/1995	Roll for use in a belt caster and an associated method
394.US 5478414	12/26/1995	Reflective aluminum strip, protected with fluoropolymer coating and a laminate of the strip with a thermoplastic polymer
395.US 5480208	01/02/1996	S-portion for a frame-type vehicle body construction and an associated method
396.US 5480587	01/02/1996	Materials for use as fire retardant additives
397.US 5481084	01/02/1996	Method for treating a surface such as a metal surface and producing products embodying such including lithoplate
398.US 5482428	01/09/1996	Apparatus and method for separating stacked articles
399.US 5484583	01/16/1996	Filler material containing an anion substituted hydrotalcite
400.US 5487295	01/30/1996	Method of forming a metal container body
401.US 5490369	02/13/1996	Capping head with magnetic clutch
402.US 5492166	02/20/1996	Shot sleeve having a passageway for fluid flow
403.US 5492604	02/20/1996	Coating composition for carbon electrodes
404.US 5492730	02/20/1996	Siloxane coating process for metal or ceramic substrates

405.US 5496426	03/05/1996	Aluminum alloy product having good combinations of mechanical and corrosion resistance properties and formability and process for producing such product
406.US 5497646	03/12/1996	Air stripper for can body maker apparatus
407.US 5498322	03/12/1996	Aluminum alloy cathode plate for electrowinning of zinc
408.US 5507888	04/16/1996	Bicycle frames and aluminum alloy tubing therefor and methods for their production
409.US 5508119	04/16/1996	Enhanced work roll surface texture for cold and hot rolling of aluminum and its alloys
410.US 5508492	04/16/1996	Apparatus for extending broad metal surface areas with a magnetically impelled arc
411.US 5508935	04/16/1996	Method for determining the radius of a bending die for use with a bending machine for bending a part and an associated apparatus
412.US 5514361	05/07/1996	Method for making a synthetic meixnerite product
413.US 5519623	05/21/1996	Improved bending machine and a method for bending a part
414.US 5522248	06/04/1996	Method of forming a metal container body
415.US 5522448	06/04/1996	Cooling insert for casting mold and associated method
416.US 5522950	06/04/1996	Substantially lead-free 6XXX aluminum alloy
417.US 5525169	06/11/1996	Corrosion resistant aluminum alloy rolled sheet
418.US 5527404	06/18/1996	Vehicle frame components exhibiting enhanced energy absorption, an alloy and a method for their manufacture
419.US 5527562	06/18/1996	Siloxane coatings for aluminum reflectors
420.US 5529222	06/25/1996	Dry bulk pressure differential container with external frame
421.US 5532447	07/02/1996	Method of cleaning an aluminum surface by plasma treatment
422.US 5533608	07/09/1996	Quick-change center star assembly for a capping machine
423.US 5535841	07/16/1996	Panel reinforcement structure
424.US 5537851	07/23/1996	Sheet product produced by massive reduction in last stand of cold rolling process
425.US 5538094	07/23/1996	Panel reinforcement structure
426.US 5538600	07/23/1996	Method for desmutting aluminum alloys having a highly-reflective surface
427.US 5543173	08/06/1996	Surface treating aluminum trihydrate powders with prehydrolyzed silane
428.US 5546785	08/20/1996	Crank mechanism for can body maker apparatus
429.US 5554309	09/10/1996	Lubricants for ceramics at elevated temperatures
430.US 5554428	09/10/1996	Memory disk sheet stock and method
431.US 5557963	09/24/1996	Method and apparatus for necking a metal container and resultant container
432.US 5559708	09/24/1996	Computer controlled flexible manufacturing of aluminum articles
433.US 5561829	10/01/1996	Method of producing structural metal matrix composite products from a blend of powders
434.US 5563700	10/08/1996	Method and apparatus for testing the material integrity of a converted can end
435.US 5564298	10/15/1996	Die tool and press monitor and product quality analysis apparatus and method
436.US 5564300	10/15/1996	Ram guidance mechanism for can body maker apparatus
437.US 5565056	10/15/1996	Plural extruder method for making a composite building panel
438.US 5565260	10/15/1996	Method and apparatus for coating strip material and ornamentally coated material produced thereby
439.US 5570502	11/05/1996	Fabricating metal matrix composites containing electrical insulators
440.US 5572786	11/12/1996	Method for holding a workpiece by vacuum
441.US 5572896	11/12/1996	Strain path control in forming processes
442.US 5573622	11/12/1996	Apparatus for fabricating multilayer structures
443.US 5577411	11/26/1996	Molten metal sensing in a closed opaque vessel

444.US 5578286	11/26/1996	Two powder synthesis of hydrotalcite-like compounds with divalent or polyvalent organic anions
445.US 5579532	11/26/1996	Rotating ring structure for gas turbine engines and method for its production
446.US 5582660	12/10/1996	Highly formable aluminum alloy rolled sheet
447.US 5584361	12/17/1996	Forging die lubricator
448.US 5590017	12/31/1996	Alumina multilayer wiring substrate provided with high dielectric material layer
449.US 5590992	01/07/1997	Cover for a bolt and nut
450.US 5595086	01/21/1997	Apparatus for calibrating hollow nonsymmetrical multiplane extrusions and associated method
451.US 5601934	02/11/1997	Memory disk sheet stock and method
452.US 5607524	03/04/1997	Drive shafts for vehicles and other applications and method for production
453.US 5616231	04/01/1997	Electrobrightening process for aluminum alloys
454.US 5616296	04/01/1997	Waste management facility
455.US 5616421	04/01/1997	Metal matrix composites containing electrical insulators
456.US 5619587	04/08/1997	System and method for contactlessly gauging the thickness of a contoured object, such as a vehicle wheel
457.US 5622569	04/22/1997	Aluminum rigid container sheet cleaner and cleaning method
458.US 5623806	04/29/1997	Changeover apparatus for positioning bottles for capping equipment
459.US 5624632	04/29/1997	Aluminum magnesium alloy product containing dispersoids
460.US 5624646	04/29/1997	Method for improving the brightness of aluminum hydroxide
461.US 5626050	05/06/1997	Method of making metal ball bats
462.US 5626929	05/06/1997	Peelable and heat sealable lidstock material for plastic containers
463.US 5630889	05/20/1997	Vanadium-free aluminum alloy suitable for extruded aerospace products
464.US 5633063	05/27/1997	Laminated building panel and method for its production
465.US 5637404	06/10/1997	Reflective aluminum strip
466.US 5645810	07/08/1997	High surface area meixnerite from hydrotalcites
467.US 5647514	07/15/1997	Dry bulk pressure differential container with external frame support
468.US 5652063	07/29/1997	Sheet or plate product made from a substantially vanadium-free aluminum alloy
469.US 5665306	09/09/1997	Aerospace structural member made from a substantially vanadium-free aluminum alloy
470.US 5667602	09/16/1997	Alloy for cast components
471.US 5669436	09/23/1997	Method of continuously casting composite strip
472.US 5672401	09/30/1997	Lubricated sheet product and lubricant composition
473.US 5674416	10/07/1997	Arc treatment of metal surfaces
474.US 5676540	10/14/1997	Flue walls using interlocking bricks
475.US 5681407	10/28/1997	Method of heat treating metal with liquid coolant containing dissolved gas
476.US 5681658	10/28/1997	Gelation-resistant alumina
477.US 5688086	11/18/1997	Standard corner fittings for aluminum container frames
478.US 5688303	11/18/1997	Mechanical alloying process
479.US 5697422	12/16/1997	Apparatus and method for cold chamber die-casting of metal parts with reduced porosity
480.US 5704240	01/06/1998	Method and apparatus for forming threads in metal containers
481.US 5707113	01/13/1998	Wheel cover assembly for a vehicle wheel
482.US 5708209	01/13/1998	Apparatus and method for ultrasonic particle detection in molten metal
483.US 5711018	01/20/1998	Rotary kiln treatment of potliner
484.US 5711991	01/27/1998	Process for making lithographic sheet material having a thermoplastic adhesive layer

485.US 5713235	02/03/1998	Method and apparatus for die necking a metal container
486.US 5713481	02/03/1998	Full panel pull out can end with vent means
487.US 5714019	02/03/1998	Method of making aluminum can body stock and end stock from roll cast stock
488.US 5718352	02/17/1998	Threaded aluminum cans and methods of manufacture
489.US 5722561	03/03/1998	Drink straw can
490.US 5724846	03/10/1998	Interruption of rolling mill chatter by induced vibrations
491.US 5725046	03/10/1998	Vertical bar caster
492.US 5725683	03/10/1998	Manufacturing clear coated aluminum alloy lighting sheet
493.US 5728180	03/17/1998	Adsorbent combinations for enhanced removal of sodium oxalate from bayer process spent liquor
494.US 5728363	03/17/1998	Two powder synthesis of hydrotalcite and hydrotalcite-like compounds
495.US 5728364	03/17/1998	Two powder synthesis of hydrotalcite and hydrotalcite like compounds
496.US 5728365	03/17/1998	Two powder synthesis of hydrotalcite and hydrotalcite-like compounds with divalent inorganic anions
497.US 5728366	03/17/1998	Two powder synthesis of hydrotalcite and hydrotalcite-like compounds with monovalent organic anions
498.US 5728725	03/17/1998	Sacrificial anode and method of making same
499.US 5730951	03/24/1998	Two powder synthesis of hydrotalcite and hydrotalcite-like compounds with polyvalent inorganic anions
500.US 5735055	04/07/1998	Method and apparatus for measuring the thickness of an article at a plurality of points
501.US 5735160	04/07/1998	Stretch forming metal bodies with polymeric internal mandrels
502.US 5735976	04/07/1998	Ceramic particles formed in-situ in metal.
503.US 5737953	04/14/1998	Process for stretch forming hollow metal bodies
504.US 5738237	04/14/1998	Easy open container end, method of manufacture, and tooling
505.US 5744412	04/28/1998	Composition and process for making an insulating refractory material
506.US 5746267	05/05/1998	Monolithic metal matrix composite
507.US 5746476	05/05/1998	Load bearing automotive bench seat assembly
508.US 5747135	05/05/1998	Thin film pretreatment for memory disks and associated methods
509.US 5749257	05/12/1998	Rivet in a converted can end, method of manufacture, and tooling
510.US 5750453	05/12/1998	High surface area meixnerite from hydrotalcites infiltrated with metal salts
511.US 5753056	05/19/1998	Transition metal salt compositions that eliminate hydrogen absorption and enhance hydrogen degassing of aluminum
512.US 5755134	05/26/1998	Rivet in a converted can end, method of manufacture, and tooling
513.US 5761942	06/09/1998	Apparatus and method for the embossing of containers
514.US 5775160	07/07/1998	Redraw mechanism for can body maker apparatus
515.US 5775403	07/07/1998	Incorporating partially sintered preforms in metal matrix composites
516.US 5775463	07/07/1998	Toeboard system for a deckplate
517.US 5776270	07/07/1998	Method for reforming a container and container produced thereby
518.US 5776424	07/07/1998	Two powder synthesis of hydrotalcite and hydrotalcite-like compounds with monovalen inorganic anions
519.US 5778723	07/14/1998	Method and apparatus for necking a metal container and resultant container
520.US 5794112	08/11/1998	Controlled atmosphere for fabrication of cermet electrodes
521.US 5795647	08/18/1998	Printing plate having improved wear resistance
522.US 5799525	09/01/1998	Tooling and method for the embossing of a container and the resulting container
523.US 5800922	09/01/1998	Method of making a gelation-resistant alumina
524.US 5800927	09/01/1998	Vanadium-free, lithium-free, aluminum alloy suitable for sheet and

		plate aerospace products
525.US 5810949	09/22/1998	Method for treating an aluminum alloy product to improve formability and surface finish characteristics
526.US 5819372	10/13/1998	Improved butt hinge with integrally formed butt straps
527.US 5820705	10/13/1998	Spray quenching of metal with liquid coolant containing dissolved gas
528.US 5820999	10/13/1998	Trimmed aluminum sheet
529.US 5822843	10/20/1998	Method of making bottle-shaped metal cans
530.US 5829136	11/03/1998	Method of making a vehicle wheel and associated method of making a vehicle wheel
531.US 5829664	11/03/1998	Resistance heated stir welding
532.US 5836193	11/17/1998	Apparatus for forming elongated metal articles and related method
533.US 5837145	11/17/1998	Method for treating water contaminated with cyanide
534.US 5848546	12/15/1998	Method of gripping tubular members during forming operations and associated apparatus
535.US 5851685	12/22/1998	Rivet in a converted can end, method of manufacture, and tooling
536.US 5853553	12/29/1998	Method of making sacrificial anode
537.US 5863359	01/26/1999	Aluminum alloy products suited for commercial jet aircraft wing members
538.US 5865911	02/02/1999	Aluminum alloy products suited for commercial jet aircraft wing members
539.US 5865914	02/02/1999	Method for making an aerospace structural member
540.US 5865931	02/02/1999	Reflective vehicle trim
541.US 5865980	02/02/1999	Electrolysis with a inert electrode containing a ferrite, copper and silver
542.US 5871247	02/16/1999	Crane wheel puller
543.US 5875911	03/02/1999	Easy open container end with method of manufacture, and tooling
544.US 5879202	03/09/1999	Battery terminal connector
545.US 5879475	03/09/1999	Vanadium-free, lithium-free aluminum alloy suitable for forged aerospace products
546.US 5881444	03/16/1999	Techniques for transferring holograms into metal surfaces
547.US 5882622	03/16/1999	Carbon dioxide adsorption of synthetic meixnerite
548.US 5884388	03/23/1999	Method for manufacturing a friction-wear aluminum part
549.US 5888695	03/30/1999	Lithographic sheet material including a metal substrate, thermoplastic adhesive layer and mineral or metal particles
550.US 5893286	04/13/1999	Apparatus and method for the registered embossing of containers
551.US 5894127	04/13/1999	Polarized specular reflectance infrared apparatus and method
552.US 5897139	04/27/1999	Front suspension casting
553.US 5909764	06/08/1999	Vertical caster and associated method
554.US 5913567	06/22/1999	Load bearing automotive bench seat assembly
555.US 5919323	07/06/1999	Corrosion resistant aluminum alloy rolled sheet
556.US 5919517	07/06/1999	Method for coating a metal strip
557.US 5919724	07/06/1999	Process for making phosphate stabilized metal oxide particles
558.US 5931520	08/03/1999	Light weight instrument panel reinforcement structure
559.US 5932375	08/03/1999	Form charging aluminum-lithium battery cells
560.US 5934357	08/10/1999	System for manufacturing metal matrix composites
561.US 5934498	08/10/1999	Convenience easy opening end with large removal panel
562.US 5938914	08/17/1999	Molten salt bath circulation design for an electrolytic cell
563.US 5938927	08/17/1999	Process for extracting oil from contaminated filter media
564.US 5941109	08/24/1999	Method and apparatus for the registration of containers
565.US 5941117	08/24/1999	Die tool thermal control and tooling optimization apparatus and method
566.US 5944373	08/31/1999	Lightweight tailgate assembly
567.US 5951794	09/14/1999	Method of forming a drive shaft



568.US 5955048	09/21/1999	Process for making flash activated hydrotalcite
569.US 5955147	09/21/1999	Reflective aluminum trim
570.US 5958531	09/28/1999	Peelable and heat sealable lidstock material for steel end containers
571.US 5968601	10/19/1999	Linear nozzle with tailored gas plumes and method
572.US 5972140	10/26/1999	Method of fabricating multilayer structures with nonplanar surfaces
573.US 5976325	11/02/1999	Laser precipitation of sodium aluminate solutions

Microfilm Number \_\_\_\_\_

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DEC 14 1998

Entity Number 10514

ACTING Secretary of the Commonwealth

ARTICLES OF AMENDMENT-DOMESTIC BUSINESS CORPORATION  
DSCB:15-1915 (Rev 90)

In compliance with the requirements of 15 Pa.C.S. § 1915 (relating to articles of amendment), the undersigned business corporation, desiring to amend its Articles, hereby states that:

1. The name of the corporation is: Aluminum Company of America

2. The (a) address of this corporation's current registered office in this Commonwealth or (b) name of its commercial registered office provider and the county of venue is (the Department is hereby authorized to correct the following information to conform to the records of the Department):

(a) 201 Isabella Street Pittsburgh Pennsylvania 15212-5858 Allegheny  
Number and Street City State Zip County

(b) c/o: \_\_\_\_\_  
Name of Commercial Registered Office Provider County

For a corporation represented by a commercial registered office provider, the county in (b) shall be deemed the county in which the corporation is located for venue and official publication purposes.

3. The statute by or under which it was incorporated is: "An Act to provide for the incorporation and regulation of certain corporations" approved April 29, 1874 and the various supplements thereto.

4. The date of its incorporation is: Sept. 18, 1888

5. (Check, and if appropriate complete, one of the following):

\_\_\_\_ The amendment shall be effective upon filing these Articles of Amendment in the Department of State.

☒ The amendment shall be effective on January 1, 1999 at \_\_\_\_\_  
Date Hour

6. (Check one of the following):

\_\_\_\_ The amendment was adopted by the shareholders (or members) pursuant to 15 Pa.C.S. § 1914(a) and (b).

☒ The amendment was adopted by the board of directors pursuant to 15 Pa.C.S. § 1914(c).

7. (Check, and if appropriate complete, one of the following):

☒ The amendment adopted by the corporation, set forth in full, is as follows:

"RESOLVED, that the Articles of the Company shall be amended to change the name of the Company, effective January 1, 1999, to Alcoa Inc. by amending Article FIRST of the Articles of the Company to read in its entirety as follows:

'FIRST. The name of the corporation is Alcoa Inc.'

(PA - 1427-109/92)

DEC 14 98

58 DEC 21 PM 1:31

98/20/8 2125 182-281-2212

CT CORPORATION SYSTEM

DEC-14-1998 11:04

DSCB:15-1915 (Rev 90)-2

\_\_\_ The amendment adopted by the corporation as set forth in full in Exhibit A attached hereto and made a part hereof.

8. \_\_\_ The restated Articles of Incorporation supersede the original Articles and all amendments thereto.

IN TESTIMONY WHEREOF, the undersigned corporation has caused these Articles of Amendment to be signed by a duly authorized officer thereof this 11<sup>TH</sup> day of DECEMBER, 19 93.

Aluminum Company of America

(Name of Corporation)

BY:

Denis A. Demblowski

(Signature)

Denis A. Demblowski

TITLE:

Secretary and Senior Counsel

(PA.-1427)

412 281 5212 P.03/08

CT CORPORATION SYSTEM

DEC-14-1998 11:05

C O M M O N W E A L T H   O F   P E N N S Y L V A N I A

D E P A R T M E N T   O F   S T A T E

FEBRUARY 19, 1999

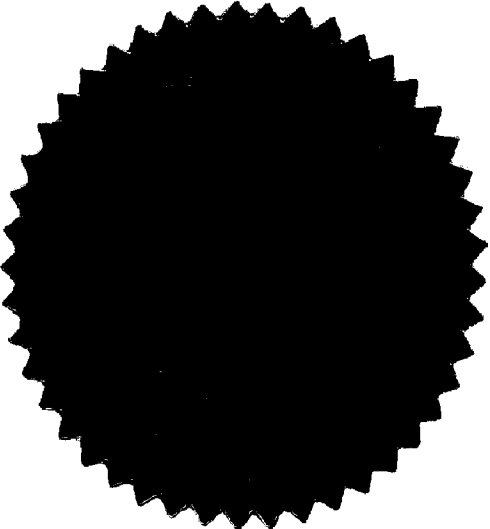
TO ALL WHOM THESE PRESENTS SHALL COME, GREETING:

ALCOA INC.

I, Kim Pizzingrilli, Acting Secretary of the Commonwealth of Pennsylvania do hereby certify that the foregoing and annexed is a true and correct photocopy of Articles of Amendment

which appear of record in this department

IN TESTIMONY WHEREOF, I have hereunto set my hand and caused the Seal of the Secretary's Office to be affixed, the day and year above written.



*Kim Pizzingrilli*

ACTING Secretary of the Commonwealth

DBOH

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner Of Patents And Trademarks  
Box Assignments  
Washington, D.C. 20231

**Transmittal Letter**

Sir:

The Aluminum Company of America has changed its name to Alcoa Inc.

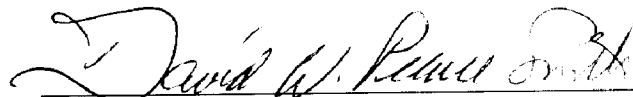
Attached is a Recordation form cover sheet with an Exhibit A and documents attesting to the name change. The Recordation form requests a name change for :

573 Patents

If there are any questions with regard to this matter, please contact me at (724)

337-2768.

Respectfully submitted,



Attorney for Applicant  
Reg. No. 31285

David W. Pearce-Smith, Esq.  
Aluminum Company of America  
Alcoa Technical Center  
100 Technical Drive  
Alcoa Center, PA 15069-0001  
☎ (412)337-2768  
FAX (412)337-5959  
bak