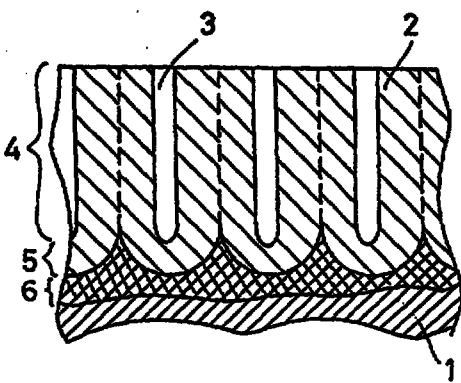


C25D

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(30) Priority Data: <table border="0"> <tr> <td>6/282313</td> <td>16 November 1994</td> <td>JP</td> </tr> <tr> <td></td> <td>(16.11.94)</td> <td></td> </tr> <tr> <td>6/282314</td> <td>16 November 1994</td> <td>JP</td> </tr> <tr> <td></td> <td>(16.11.94)</td> <td></td> </tr> <tr> <td>7/66231</td> <td>24 March 1995</td> <td>JP</td> </tr> <tr> <td></td> <td>(24.03.95)</td> <td></td> </tr> <tr> <td>7/66232</td> <td>24 March 1995</td> <td>JP</td> </tr> <tr> <td></td> <td>(24.03.95)</td> <td></td> </tr> <tr> <td>7/68232</td> <td>27 March 1995</td> <td>JP</td> </tr> <tr> <td></td> <td>(27.03.95)</td> <td></td> </tr> </table>	6/282313	16 November 1994	JP		(16.11.94)		6/282314	16 November 1994	JP		(16.11.94)		7/66231	24 March 1995	JP		(24.03.95)		7/66232	24 March 1995	JP		(24.03.95)		7/68232	27 March 1995	JP		(27.03.95)		(54) Title: VACUUM CHAMBER MADE OF ALUMINUM OR ITS ALLOY, AND SURFACE TREATMENT AND MATERIAL FOR THE VACUUM CHAMBER	
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(71) Applicant (for all designated States except US): KABUSHIKI KAISHA KOBE SEIKO SHO [JP/JP]; 3-18, Wakino-hama-cho 1-chome, Chuo-ku, Kobe-shi, Hyogo 651 (JP). (72) Inventors; and (73) Inventors/Applicants (for US only): HISAMOTO, Jun [JP/JP]; 7-3-4-431, Takamaru, Tanumi-ku, Kobe-shi, Hyogo 655 (JP). WADA, Koji [JP/JP]; 1-4-4-802, Mikutadai, Nishi-ku, Kobe-shi, Hyogo 651-22 (JP). IKEDA, Koki [JP/JP]; 6-4-8-803, Shirakawadai, Suma-ku, Kobe-shi, Hyogo 654-01 (JP). YANAGAWA, Masahiro [JP/JP]; J201, 2-3-18, Kouyoudai, Tanumi-ku, Kobe-shi, Hyogo 655 (JP). (74) Agent: UEKI, Kyuichi; Ueki & Co., Room 407, Shinko Building, 3-7, Dojima 2-chome, Kita-ku, Osaka-shi, Osaka 530 (JP).																																
(81) Designated States: KR, <u>SG</u>, US, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published With international search report.	(57) Abstract A vacuum chamber with a base of aluminum or its alloy having excellent corrosion resistance to corrosive gas or plasma introduced into a vacuum chamber. This chamber has an anodized porous coating in which the pore diameter is small on the surface side and large on the base side. For the anodizing, the final voltage is set to a higher voltage than the initial voltage. After the porous coating is applied, a non-porous coating may be applied to grow a barrier layer. The alloy material contains particles resulting from crystallization and recrystallization, and preferably they are smaller than 10 μm in average particle size and in parallel with the largest surface of the material.																															

(21) Int. Application Number: PCT/GB95/02655 (22) Int. Filing Date: 13 November 1995 (13.11.95)	(51) International Patent Classification⁶: C25D 11/24, C23C 22/83	(11) Int. Publication Number: WO 96/15296 (43) Int. Publication Date: 23 May 1996 (23.05.96)						
(30) Priority Data: <table border="0"> <tr> <td>9422952.3</td> <td>14 November 1994</td> <td>GB</td> </tr> <tr> <td></td> <td>(14.11.94)</td> <td></td> </tr> </table>	9422952.3	14 November 1994	GB		(14.11.94)		(54) Title: TREATMENT OF ALUMINIUM OR ALUMINIUM ALLOYS	
9422952.3	14 November 1994	GB						
	(14.11.94)							
(71) Applicant (for all designated States except US): THE SECRETARY OF STATE FOR DEFENCE [GB/GB]; Defence Evaluation and Research Agency, Farnborough, Hampshire GU14 6TD (GB). (72) Inventors; and (73) Inventors/Applicants (for US only): BALDWIN, Kevin, Richard [GB/GB]; Defence Evaluation and Research Agency, Intellectual Property Dept., R69 Building, Farnborough, Hampshire GU14 6TD (GB). SMITH, Christopher, John, Ewell [GB/GB]; Defence Evaluation and Research Agency, Intellectual Property Dept., R69 Building, Farnborough, Hampshire GU14 6TD (GB). LANE, Peter, Leslie [GB/GB]; Defence Evaluation and Research Agency, Intellectual Property Dept., R69 Building, Farnborough, Hampshire GU14 6TD (GB). (74) Agents: BECKHAM, Robert, William et al.; Defence Evaluation and Research Agency, Intellectual Property Department, R69 Building, Farnborough, Hampshire GU14 6TD (GB). (81) Designated States: AU, CA, CN, GB, JP, KR, US, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published With international search report.	(57) Abstract A method for treating the surface or surfaces of an aluminium or aluminium alloy containing substrate to confer corrosion resistance in which a porous layer is created on the surface or surfaces and then the surface or surfaces are treated with a solution or gel comprising a metavanadate ion, and further treated with a solution comprising a metal ion selected to coprecipitate with the metavanadate ion to form a sparingly soluble compound within the pores of the porous layer. A corrosion resistant coating for aluminium or aluminium alloy comprising a porous surface layer containing within the pores a deposit of a sparingly soluble metal metavanadate. The porous layer may be an oxide layer produced for example by acid anodising.							