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| <b>(51) International Patent Classification <sup>6</sup>:</b><br><b>H01B 1/08, 1/20, C01G 19/02, C09D 5/24</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>A1</b> | <b>(11) International Publication Number:</b> <b>WO 96/06437</b><br><b>(43) International Publication Date:</b> 29 February 1996 (29.02.96)                                                                              |
| <b>(21) International Application Number:</b> PCT/US95/08953<br><b>(22) International Filing Date:</b> 1 August 1995 (01.08.95)<br><br><b>(30) Priority Data:</b><br>08/292,895      18 August 1994 (18.08.94)      US<br><br><b>(71) Applicant:</b> E.I. DU PONT DE NEMOURS AND COMPANY<br>[US/US]; 1007 Market Street, Wilmington, DE 19898 (US).<br><br><b>(72) Inventors:</b> BERGMANN, Oswald, Robert; 715 Burnley Road,<br>Wilmington, DE 19803-1730 (US). FEIST, Thomas, Paul;<br>415 Topsfield Road, Hockessin, DE 19707-9716 (US).<br>HORMADALY, Jacob; 1422 Carson Road, Wilmington,<br>DE 19803-5116 (US). JACOBSON, Howard, Wayne; 2009<br>Longcome Drive, Wilmington, DE 19810-3873 (US).<br><br><b>(74) Agents:</b> BOYER, Michael, K. et al.; E.I. du Pont de Nemours<br>and Company, Legal/Patent Records Center, 1007 Market<br>Street, Wilmington, DE 19898 (US). |           | <b>(81) Designated States:</b> CA, FI, JP, KR, <del>SG</del> European patent (AT,<br>BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL,<br>PT, SE).<br><br><b>Published</b><br><i>With international search report.</i> |
| <b>(54) Title:</b> TIN OXIDE BASED CONDUCTIVE POWDERS AND COATINGS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           |                                                                                                                                                                                                                          |
| <b>(57) Abstract</b><br><br>A product and process are disclosed that relate to electroconductive powders based on tantalum, niobium, or phosphorus or any combination thereof doped tin oxide and coatings containing such powders. These powders can be used for making transparent coated films that are conductive and have desirable properties for a number of end uses. Some important end uses are in static dissipative fiber and films, coatings for recyclable containers, materials involved in packaging, where the presence of certain heavy metals is undesirable, transparent conductive coatings, among other uses.                                                                                                                                                                                                                                                 |           |                                                                                                                                                                                                                          |