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(54) Title: HETERODIAMONDOID-CONTAINING FIELD EMISSION DEVICES

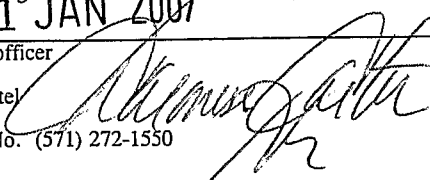
(57) Abstract: Novel heterodiamondoid-containing field emission devices (FED's) are disclosed herein. In one embodiment of the present invention, the heteroatom of the heterodiamondoid comprises an electron-donating species (such as nitrogen) as part of the cathode or electron-emitting component of the field emission device.



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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US05/02613

<p>A. CLASSIFICATION OF SUBJECT MATTER IPC: H01J 1/00(2006.01);H01J 1/02(2006.01)</p> <p>USPC: 313/311;313/310;313/309 According to International Patent Classification (IPC) or to both national classification and IPC</p>														
<p>B. FIELDS SEARCHED</p> <p>Minimum documentation searched (classification system followed by classification symbols) U.S. : 313/311; 313/310; 313/309; 313/495; 313/496; 313/497</p> <p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched</p> <p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)</p>														
<p>C. DOCUMENTS CONSIDERED TO BE RELEVANT</p> <table border="1"> <thead> <tr> <th>Category *</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>X</td> <td>US 5,984,752 A (TANAKA et al) 16 November 1999 (16.11.1999)</td> <td>1-5,8,10,18,20,22-23</td> </tr> <tr> <td>Y</td> <td>US 5,234,724 A (SCHMIDT) 10 August 1993 (10.08.1993)</td> <td>12,13,15,16,19,21</td> </tr> <tr> <td>Y</td> <td>US 5,578,901 A (BLANCHET-FINCHER et al) 26 November 1996 (26.11.1996)</td> <td>12,13,15,16,19,21</td> </tr> </tbody> </table>			Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	X	US 5,984,752 A (TANAKA et al) 16 November 1999 (16.11.1999)	1-5,8,10,18,20,22-23	Y	US 5,234,724 A (SCHMIDT) 10 August 1993 (10.08.1993)	12,13,15,16,19,21	Y	US 5,578,901 A (BLANCHET-FINCHER et al) 26 November 1996 (26.11.1996)	12,13,15,16,19,21
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