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(54) Title: TRANSITION METAL COMPLEXES WITH (PYRIDYL)IMIDAZOLE LIGANDS

(57) Abstract: Novel transition metal complexes of iron, cobalt, ruthenium, osmium, and vanadium are described. The transition metal complexes can be used as redox mediators in enzyme-based electrochemical sensors. The transition metal complexes include substituted or unsubstituted (pyridyl)imidazole ligands. Transition metal complexes attached to polymeric backbones are also described.

**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/US02/14918

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : C07F 15/00; GO1N 27/327  
 US CL : 204/403.14,403.04; 526/161; 546/2; 548/101

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 204/403.1,403.14,403.04,418; 526/161; 546/2; 548/101

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Please See Continuation Sheet

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y --- A	DOHERTY et al, Electroanalysis, 1995, 7, No. 4, pp. 333-339, see fig. 1 and section 2.2.2. of p. 334.	1-3, 7-14, 16, 17, 19-48 ----- 4-6, 15, 18
Y, P --- A, P	US 6,338,790 B1 (FELDMAN et al) 15 January 2002 (15.01.2002), col. 15, formula III and col. 38, lines 15-24.	1-3, 7-14, 16, 17, 19-48 ----- 4-6, 15, 18
A	YU et al, Macromolecules 1999, 32, pp. 5251-5256, see schemes 2 and 3 on p. 5253.	1-38
A	GHOLAMKHAASS et al, J. Phys. Chem. B, 1997, 101, pp. 9010-9021, see fig. 1.	1-38

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

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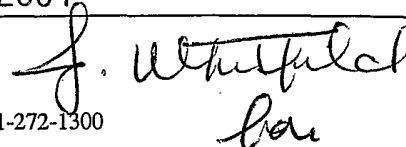
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**INTERNATIONAL SEARCH REPORT**

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**Continuation of B. FIELDS SEARCHED Item 3:**  
CAPLUS, STN structure search