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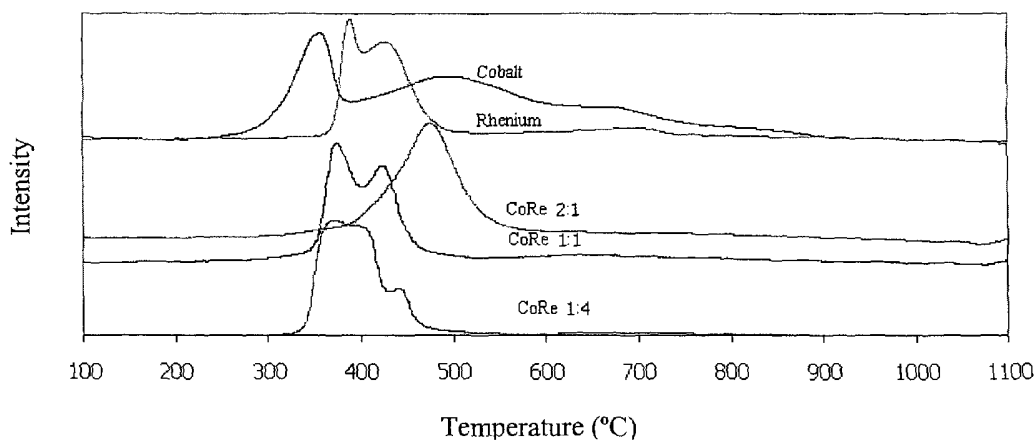
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(54) Title: RHENIUM CATALYSTS AND METHODS FOR PRODUCTION OF SINGLE-WALLED CARBON NANOTUBES



(57) Abstract: The present invention is a method and catalyst for selectively producing single-walled carbon nanotubes. The catalyst comprise rhenium and a Group VIII transition metal, for example Co, which is preferably disposed on a support material to form a catalytic substrate. In the method, a carbon-containing gas is exposed to the catalytic substrate at suitable reaction conditions whereby a high percentage of the carbon nanotubes produced by the reaction is single-walled carbon nanotubes.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/40022

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : D01F 9/12
 US CL : 423/447.2

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. : 423/447.2; 428/408,367; 252/378R

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6,942,921 B2 (RUECKES et al.) 13 September 2005 (13.09.2005), entire document.	1-47
A	US 6,913,789 B2 (SMALLEY et al.) 05 July 2005 (05.07.2005), entire document.	1-47
A	US 6,713,519 B2 (WANG et al.) 30 March 2004 (30.03.2004), entire document.	1-47
A	US 6,872,330 B2 (MACK et al.) 29 March 2005 (29.03.2005), entire document.	1-47

Further documents are listed in the continuation of Box C.

See patent family annex.

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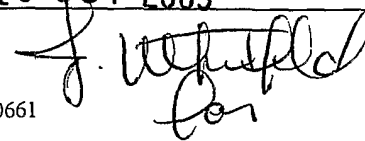
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