



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : B01D 53/88, 53/74, 53/04, B60H 3/00 3/06, 1/00, 1/32, B01D 53/86	A3	(11) International Publication Number: WO 96/22146 (43) International Publication Date: 25 July 1996 (25.07.96)
(21) International Application Number: PCT/US96/00881 (22) International Filing Date: 19 January 1996 (19.01.96) (30) Priority Data: 08/376,332 20 January 1995 (20.01.95) US 08/410,445 24 March 1995 (24.03.95) US 08/537,206 29 September 1995 (29.09.95) US 08/537,208 29 September 1995 (29.09.95) US 08/ 19 January 1996 (19.01.96) US 08/ 19 January 1996 (19.01.96) US (71) Applicant (for all designated States except US): ENGELHARD CORPORATION [US/US]; 101 Wood Avenue, Iselin, NJ 08830 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): HOKE, Jeffrey, B. [US/US]; 1374 Luke Street, North Brunswick, NJ 08902 (US). NOVAK, John, R. [US/US]; 9 Banff Drive, Lawrenceville, NJ 08648 (US). STEGER, John, J. [US/US]; 1 Dark Hollow Lane, Pittstown, NJ 08867 (US). POLES, Terrence, C. [GB/US]; 6 Fischer Court, Ringoes, NJ 08551 (US). QUICK, L., Michael [US/US]; 692 John Christian Drive, Bridgewater, NJ 08807 (US). HECK, Ronald, M. [US/US]; 269 Kingwood Station Road, Frenchtown, NJ	08825 (US). HU, Zhicheng [CN/US]; 3 Woodruff Road, Edison, NJ 08820 (US). ALLEN, Fred, M. [US/US]; 1 Hart Court, East Windsor, NJ 08520 (US). BLOSSER, Patrick, W. [US/US]; 57 Oxford Drive, East Windsor, NJ 08520 (US). DEEBA, Michel [US/US]; 2501 North Oaks Boulevard, North Brunswick, NJ 08902 (US). (74) Agents: MILLER, Stephen, I. et al.; Engelhard Corporation, 101 Wood Avenue, Iselin, NJ 08830 (US). (81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AZ, BY, KG, KZ, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 31 October 1996 (31.10.96)	
(54) Title: VEHICLE HAVING ATMOSPHERE POLLUTANT TREATING SURFACE		
(57) Abstract <p>A method and apparatus for treating the atmosphere comprising moving a vehicle through the atmosphere, the vehicle having at least one atmosphere contacting surface and a pollutant treating composition located on said surface. A specific embodiment comprises coating a motor vehicle radiator with pollutant treating catalyst.</p>		

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 96/00881

A. CLASSIFICATION OF SUBJECT MATTER			
IPC 6	B01D53/88 B60H1/00	B01D53/74 B60H1/32	B01D53/04 B01D53/86
			B60H3/00 B60H3/06
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)			
IPC 6 B01D B60H F28F			
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 practical, 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.
X	DE,U,94 15 457 (PROBST) 17 November 1994		1,3,60, 62,119
E	see the whole document & WO,A,96 09109 (PROBST)		1,3,60, 62,119
	see the whole document		
X	DE,A,40 07 965 (HAGER) 19 September 1991		2,61, 103,104, 106,107, 119,150, 167
	see the whole document & DE,A,40 07 964 (HAGER)		
	see the whole document		

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<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.			
* Special categories of cited documents :			
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Date of the actual completion of the international search		Date of mailing of the international search report	
30 August 1996		19 -09- 1996	
Name and mailing address of the ISA		Authorized officer	
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+ 31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+ 31-70) 340-3016		Eijkenboom, A	

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International Application No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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X	DE,C,43 18 738 (LANG VON LANGEN ET AL.) 14 July 1994 see the whole document ---	2,3
A	PATENT ABSTRACTS OF JAPAN vol. 017, no. 106 (M-1375), 4 March 1993 & JP,A,04 297341 (NAGATOSHI SUZUKI), 21 October 1992, see abstract ---	1-124, 150-225
A	DATABASE WPI Section Ch, Week 8039 Derwent Publications Ltd., London, GB; Class J01, AN 80-68830C XP002004499 & JP,A,55 106 813 (MATSUSHITA ELEC IND KK) , 17 August 1980 see abstract ---	1-124, 150-225
A	US,A,5 145 822 (SOLVAY CATALYSTS GMBH) 8 September 1992 see column 8, line 27 - column 9, line 2; claims 1-14 ---	1-124, 150-225
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US,A,5 283 041 (ENGELHARD CORP.) 1 February 1994 see column 3, line 51 - column 7, line 7; claims 1-26; examples 1-5	125-129, 136, 226-228, 233-241
Y	---	242-246
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE,A,30 19 828 (SHARP KK ;MIEYUSHIKAKO CO (JP)) 27 November 1980 see page 10, paragraph 2 - page 12, paragraph 2; claims 4-6 ---	136,138, 139,142, 144
X	DATABASE WPI Section Ch, Week 7804 Derwent Publications Ltd., London, GB; Class A88, AN 78-07449A XP002012142 & JP,A,52 148 468 (ICE KK) , 9 December 1977 see abstract ---	136,138, 140,142, 144
X	EP,A,0 373 648 (MATSUSHITA ELECTRIC IND CO LTD) 20 June 1990 see claims 1-13; example 6 ---	136,138, 141,142
A	DATABASE WPI Section Ch, Week 8128 Derwent Publications Ltd., London, GB; Class A81, AN 81-50528D XP002012143 & JP,A,56 059 671 (FUJI TITAN KOGYO KK) , 23 May 1981 see abstract ---	136-144
X	EP,A,0 351 036 (CORNING GLASS WORKS) 17 January 1990 see page 3, line 28 - page 4, line 49; examples ---	226-241
A	DE,A,25 49 621 (SIEMENS AG) 12 May 1977 see page 4, paragraph 3 - page 5, paragraph 1 ---	226-233
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INTERNATIONAL SEARCH REPORT

 Int'l Application No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DATABASE WPI Section Ch, Week 9310 Derwent Publications Ltd., London, GB; Class A97, AN 93-079624 XP002012145 & JP,A,05 023 590 (SAKAI CHEM IND CO LTD) , 2 February 1993 see abstract ---	125-149, 226-246
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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 96/00881

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

See annex

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/210

- 1 - Claims 1-124, 150-225
- 2 - Claims 125 - 130
- 3 - Claims 131 - 135
- 4 - Claims 136 - 144
- 5 - Claims 145 - 149
- 6 - Claims 226 - 246

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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Information on patent family members

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