Filed on behalf of Hyundai Motor America & Hyundai Motor Company

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

HYUNDAI MOTOR AMERICA, INC., HYUNDAI MOTOR COMPANY, KIA MOTORS CORPORATION & KIA MOTORS AMERICA, INC.

Petitioners

V.

PAICE LLC & ABELL FOUNDATION, INC. Patent Owners

Case: To Be Assigned U.S. Patent No. 7,104,347

PETITION FOR *INTER PARTES* REVIEW UNDER 35 U.S.C. § 311 *ET SEQ*. AND 37 C.F.R. §42.100 *ET SEQ*. (CLAIMS 23, 25-30, 32, AND 39-41 OF U.S. PATENT NO. 7,104,347)



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EXHIBIT LIST

Exhibit No.	Description	Date	Identifier
1401	US Patent 7,104,347	Sept. 12, 2006	'347 Patent
1402	Ford Letter to Paice	Sept. 2014	Ford Letter
1403	US Patent 5,789,882	Aug. 4, 1998	Ibaraki '882
1404	US Patent 5,623,104	Apr. 22, 1997	Suga
1405	US Patent 4,335,429	June 15, 1982	Kawakatsu '429
1406	Automotive Electronics Handbook (Jurgen)		Jurgen
1407	US Patent 5,823,280	Oct. 20, 1998	Lateur
1408	Declaration of Gregory Davis		Davis Dec.
1409	US Application 60-100095	Filed Sept. 11, 1998	'095 Provisional
1410	Excerpt of USPN 7,104,347 File History	n/a	'347 File History
1411	U.S. Patent No. 7,237,634	July 3, 2007	'634 Patent
1412	7,237,634 File History (certi-	n/a	'634 Patent File
	fied)		History
1413	Toyota Litigations	2005	Toyota Litigation
1414	Hyundai Litigation	2013-2014	Hyundai Litiga- tion
1415	PTAB Decisions & Preliminary Response in 2014-00571		Ford IPRs
1416	Bosch Automotive Hand- book (1996)	Oct. 1996	Bosch Handbook
1417	US Patent 5,934,395	Aug. 10, 1999	Koide
1418	US Patent 6,116,363	Sept. 12, 2000	Frank
1419	Engineering Fundamentals of the Internal Combustion Engine	1997	Pulkrabek
1420	Fiat Conceptual Approach to Hybrid Cars Design (Vittone)	Dec. 5-7, 1994	Vittone
1421	US Patent 5,865,263	Feb. 2, 1999	Yamaguchi
1422	US Patent 6,003,626	Dec. 21, 1999	Ibaraki '626



Exhibit	Description	Date	Identifier
No. 1423	Innovations in Design: 1002	Feb. 1994	
1423	Innovations in Design: 1993 Ford Hybrid Electric Vehicle	Feb. 1994	
	Challenge		
1424	1996 & 1997 Future Car	Feb. 1997 &	
1727	Challenge	Feb. 1998	
1425	Introduction to Automotive	100.1770	Davis Textbook
1 123	Powertrain (Davis)		Davis Textbook
1426	History of Hybrid Electric	1998	Wakefield
1.20	Vehicle (Wakefield-1998)		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
1427	SAE 760121 (Unnewehr-	Feb. 1, 1976	Unnewehr
	1976)	,	
1428	SAE 920447 (Burke-1992)	Feb. 1, 1992	Burke 1992
1429	Vehicle Tester for HEV	Aug. 1, 1997	Duoba 1997
	(Duoba- 1997)		
1430	DOE Report to Congress	April 1995	1994 Report to
	(1994)		Congress
1431	SAE SP-1331 (1998)	Feb. 1998	SAE SP-1331
1432	SAE SP-1156 (1996)	Feb. 1996	SAE SP-1156
1433	Microprocessor Design for	Sept. 1, 1988	Bumby/Masding
	HEV (Bumby-1988)		1988
1434	DOE HEV Assessment	Sept. 30, 1979	HEV Assessment
	(1979)		1979
1435	EPA HEV Final Study	June 1, 1971	EPA HEV Final
	(1971)		Study
1436	Propulsion System for De-	June 18, 2005	IEEE Ehsani
1.10=	sign for EV (Ehsani-1996)	7.1.4007	1996
1437	Propulsion System Design	Feb. 1997	IEEE Ehsani
1.420	for HEV (Ehsani-1997)	11 1000	1997
1438	Critical Issues in Quantify-	Aug. 11, 1998	An 1998
	ing HEV Emissions (An		
1420	1998)	Nov. 25, 1000	0222262
1439	WO 9323263A1 (Field)	Nov. 25, 1998	9323263
1440	Toyota Prius (Yamaguchi-1998)	Jan. 1998	Toyota Prius Yamaguchi 1998
1441	,	April 3 2001	'672 Patent
1441	US Patent 6,209,672 SAE SP-1089 (Anderson-	April 3, 2001 Feb. 1995	SAE SP-1089
1772	DUT DI -1003 (VIIICIZOII-	100.1993	SAL SI -1009



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