UNITED STATES PATENT AND TRADEMARK OFFICE ————— BEFORE THE PATENT TRIAL AND APPEAL BOARD ——————

FORD MOTOR COMPANY Petitioner,

v.

PAICE LLC & ABELL FOUNDATION, INC. Patent Owners.

U.S. Patent No. 7,104,347 to Severinsky *et al*. IPR Case No. <u>IPR2015-00795</u>

DECLARATION OF DR. GREGORY W. DAVIS IN SUPPORT OF PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE



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I.	Ibaraki '882 discloses a torque based line				
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Updated Exhibit List

Exhibit			
No.	Description	Date	Identifier
1301	US Patent 7,104,347	Sept. 12, 2006	'347 Patent
1302	Ford Letter to Paice	Sept. 2014	
1303	US Patent 5,789,882	Aug. 4, 1998	Ibaraki '882
1304	US Patent 5,623,104	Apr. 22, 1997	Suga '104
1305	US Patent 4,335,429	Jun. 15, 1982	Kawakatsu '429
1306	Automotive Electronics Handbook (Jurgen)		Jurgen
1307	US Patent 5,823,280	Oct. 20, 1998	Lateur '280
1308	Declaration of Gregory Davis	Oct. 20, 1990	Davis Dec.
1309	US Application 60-100095	Filed Sept. 11, 1998	'095 Provisional
1310	Excerpt of USPN 7,104,347 File History	n/a	'347 File History
1311	U.S. Patent No. 7,237,634	July 3, 2007	'634 Patent
1312	7,237,634 File History (certified)	n/a	'634 Patent File History
1313	Toyota Litigations	2005	Toyota Litigation
1314	Hyundai Litigation	2013-2014	Hyundai Litigation
1315	PTAB Decisions & Preliminary Response in 2014-00571		
1316	Bosch Automotive Handbook (1996)	Oct. 1996	Bosch Handbook
1317	US Patent 5,934,395	Aug. 10, 1999	Koide
1318	US Patent 6,116,363	Sept. 12, 2000	Frank
1319	Engineering Fundamentals of the Internal Combustion Engine	1997	Pulkrabek
1320	Fiat Conceptual Approach to Hybrid Cars Design (Vittone)	Dec. 5-7, 1994	Vittone
1321	US Patent 5,865,263	Feb. 2, 1999	Yamaguchi
1322	US Patent 6,003,626	Dec. 21, 1999	Ibaraki '626
1323	Innovations in Design: 1993 Ford Hybrid Electric Vehicle Challenge	Feb. 1994	



Exhibit			
No.	Description	Date	Identifier
1324	1996 & 1997 Future Car	Feb. 1997 &	
	Challenge	Feb. 1998	
1325	Introduction to Automotive		Davis Textbook
	Powertrain (Davis)		
1326	History of Hybrid Electric	1998	Wakefield
	Vehicle (Wakefield-1998)		
1327	SAE 760121 (Unnewehr-1976)	Feb. 1, 1976	Unnewehr
1328	SAE 920447 (Burke-1992)	Feb. 1, 1992	Burke 1992
1329	Vehicle Tester for HEV (Duoba-1997)	Aug. 1, 1997	Duoba 1997
1330	DOE Report to Congress (1994)	April 1995	1994 Report to
			Congress
1331	SAE SP-1331 (1998)	Feb. 1998	SAE SP-1331
1332	SAE SP-1156 (1996)	Feb. 1996	SAE SP-1156
1333	Microprocessor Design for HEV	Sept. 1, 1988	Bumby/Masding
	(Bumby-1988)		1988
1334	DOE HEV Assessment (1979)	Sept. 30, 1979	HEV Assessment 1979
1335	EPA HEV Final Study (1971)	June 1, 1971	EPA HEV Final
			Study
1336	Propulsion System for Design for EV (Ehsani-1996)	June 18, 2005	IEEE Ehsani 1996
1337	Propulsion System Design for HEV (Ehsani-1997)	Feb. 1997	IEEE Ehsani 1997
1338	Critical Issues in Quantifying HEV Emissions (An 1998)	Aug. 11, 1998	An 1998
1339	WO 9323263A1 (Field)	Nov. 25, 1998	9323263
1340	Toyota Prius (Yamaguchi-1998)	Jan. 1998	Toyota Prius
			Yamaguchi 1998
1341	US Patent 6,209,672	April 3, 2001	'672 Patent
1342	SAE SP-1089 (Anderson-1995)	Feb. 1995	SAE SP-1089
1343	1973 Development of the	1973	SAE 1973
	Federal Urban Driving Schedule (SAE 730553)		
1344	Gregory Davis Resume		
1345	Gregory Davis Data		
1346	US Patent 4,407,132	Oct. 4, 1983	Kawakatsu '132



Exhibit			
No.	Description	Date	Identifier
1347	Final Decision, IPR2014-00904,	December 10,	'904 Decision
	Paper 41	2015	
1348	Final Decision, IPR2014-00571,	September 28,	'571 Decision
12.10	Paper 44	2015	
1349	Final Decision, IPR2014-01416,	March 10, 2016	'1416 Decision
1250	Paper 26	G 4 2015	11
1350	Deposition Transcript of Neil Hannemann for IPR2014-01416	Sept. 4, 2015	Hannemann '1416
1351	Final Decision, IPR2014-00884,	December 10,	Dep. '884 Decision
1331	Paper 38	2015	004 Decision
1352	Final Decision, IPR2014-00875,	November 23,	'875 Decision
1332	Paper 38	2015	073 Decision
1353	Final Decision, IPR2014-01415,	March 10, 2016	'1415 Decision
	Paper 30		
1354	Deposition Transcript of Neil	April 8, 2015	Hannemann '570
	Hannemann for IPR2014-00570		Dep.
1355	Deposition Transcript of Neil	April 30, 2015	Hannemann '875
1077	Hannemann for IPR2014-00875		Dep.
1356	Exhibit 2 from deposition of Neil	April 30, 2015	'875 Dep. Exhibit
1257	Hannemann for IPR2014-00875	March 10, 2015	'884 POR
1357	Patent Owner's Response, IPR2014-00884, Paper 19	March 10, 2015	004 POR
1358	Modern Electric, Hybrid Electric	2005	Ehsani
1330	and Fuel Cell Vehicles	2003	Liisum
1359	Bosch Handbook	1976	Bosch Handbook
			1976
1360	Deposition Transcript of Neil	April 30, 2015	Hannemann '884
	Hannemann for IPR2014-00884		Dep.
1361	Deposition Transcript of Neil	April 27, 2016	Hannemann '787
	Hannemann for IPR2014-00787		Dep.
1362	Exhibit 12 from Deposition	April 30, 2015	'884 Dep. Exhibit
	Transcript of Neil Hannemann		
1262	(IPR2014-00884)	June 17, 2015	'1416 DOD
1363	Patent Owner's Response, IPR2014-01416, Paper 17	June 17, 2015	'1416 POR
1364	Deposition Transcript of Neil	April 7, 2015	Hannemann '571
1507	Hannemann for IPR2014-00571	71pm 7, 2013	Dep.
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