UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

FORD MOTOR COMPANY Petitioner,

v.

PAICE LLC & ABELL FOUNDATION, INC. Patent Owner.

U.S. Patent No. 7,104,347 to Severinsky *et al.* IPR Case No. IPR2014-00579

REPLY TO PATENT OWNER'S RESPONSE TO PETITION FOR INTER PARTES REVIEW OF U.S. PATENT NO 7,104,347



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II.	The Board's construction of <i>setpoint</i> is correct and Paice's proposed construction would not affect Petitioner's analysis		
III.	A POSA would have combined the Bumby references		
	А.	Bumby IV or V do not "teach away" from the sub-optimal control algorithm taught by Bumby II and III	
IV.	The Bumby references disclose <i>a setpoint</i> that is used for determining when to operate the engine/motor in claims 1 and 23		
V.	The Bumby references determine <i>road load</i> as recited in claim 7 and 2312		
VI.	VI. It was obvious to a POSA that a conventional starter motor coul current from the claimed battery as required in claim 1 and 8		
	А.	Claim 1 is satisfied by a conventional starter motor	
	В.	Claim 8 is satisfied by a conventional starter motor	
VII.	The battery charging limitations of claims 1 and 23 would be obvious in view of the Bumby references		
VIII.	Conc	lusion	
Certif	ficate o	of Service	

Table of Authorities

Cases

Beckman Instruments v. LKB Produkter AB, 892 F.2d 1547 (Fed. Cir. 1989)	4
In re Fulton, 391 F.3d 1195 (Fed. Cir. 2004)	
KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398 (2007)	5
<i>Phillips v. AWH Corp.</i> , 415 F. 3d 1303 (Fed. Cir. 2005)	
Superguide Corp. v. DirecTV Enterprises, Inc., 358 F.3d 870 (Fed. Cir. 2004)	

U	pdated	Exhibit	List

Exhibit	_	_	
No.	Description	Date	Identifier
1101	U.S. Patent No. 7,104,347	n/a	The '347 Patent
1102	'347 Patent File History	n/a	'347 Patent File
			History
1103	Bumby, J.R. et al. "Computer	Sept. 1985	Bumby I
	modelling of the automotive energy		
	requirements for internal combustion		
	engine and battery electric-powered		
	vehicles" - IEE Proc. A 1985(5)		
1104	Bumby, J.R. et al. "Optimisation and	Nov. 1987	Bumby II
	control of a hybrid electric car" - IEE		
	Proc. A 1987, 134(6)		
1105	Bumby, J.R. et al. "A Hybrid Internal	Jan. 1988	Bumby III
	Combustion Engine/Battery Electric		
	Passenger Car for Petroleum		
	Displacement" – Proc Instn Mech		
	Engrs Volume 202 (D1), 51-65		
1106	Bumby, J.R. et al. "A Test-Bed	Apr. 1, 1988	Bumby IV
	Facility for Hybrid IC Engine-Battery		
	Electric Road Vehicle Drive Trains" -		
	Trans Inst Meas & Cont 1988 Vol.		
	10(2)		
1107	Bumby, J.R. et al. "Integrated	Jan. 1, 1990	Bumby V
	Microprocessor Control of a Hybrid		
	i.c. Engine/Battery-Electric		
	Automotive Power Train" - Trans		
	Inst Meas & Cont 1990 Vol. 12:128		
1108	Declaration of Gregory W. Davis		
1118	Curriculum Vitae of Gregory Davis		Declaration Ex.
1119	Innovations in Design: 1993 Ford	Feb. 1994	Declaration Ex.
	Hybrid Electric Vehicle Challenge		
1120	1996 Future Car Challenge	Feb. 1997	Declaration Ex.
1121	1997 Future Car Challenge	Feb. 1998	Declaration Ex.
1122	History of the Electric Automobile –	1998	Declaration Ex.
	Hybrid Electric Vehicles		
1123	Hybrid Vehicle for Fuel Economy		Declaration Ex.

Exhibit			
No.	Description	Date	Identifier
1124	Hybrid/Electric Vehicle Design	Feb. 24-28,	Declaration Ex.
	Options and Evaluations	1992	
1125	Challenges for the Vehicle Tester in	April 9-11,	Declaration Ex.
	Characterizing Hybrid Electric	1997	
	Vehicles		
1126	Electric and Hybrid Vehicles	April 1995	Declaration Ex.
	Program		
1127	Technology for Electric and Hybrid	Feb. 1998	Declaration Ex.
	Vehicles		
1128	Strategies in Electric and Hybrid	Feb. 1996	Declaration Ex.
	Vehicle Design		
1129	Hybrid Vehicle Potential Assessment	Sept. 30, 1979	Declaration Ex.
1130	Final Report Hybrid Heat Engine /	June 1, 1971	Declaration Ex.
	Electric Systems Study		
1131	Transactions of the Institute of	Sept. 1, 1988	Declaration Ex.
	Measurements and Control: A		
	microprocessor controlled gearbox		
	for use in electric and hybrid-electric		
	vehicles		
1132	Propulsion System Design of Electric	1996	Declaration Ex.
	Vehicles		
1133	Propulsion System Design of Electric	Feb. 1997	Declaration Ex.
	and Hybrid Vehicles		
1134	Bosch Handbook	Oct. 1996	Declaration Ex.
1135	Design Innovations in Electric and	Feb. 1995	Declaration Ex.
	Hybrid Electric Vehicles		
1136	U.S. Patent No. 6,209,672	Apr. 3, 2001	Declaration Ex.
1137	Introduction to Automotive		Declaration Ex.
	Powertrains (Davis Textbook)		
1138	Yamaguchi article: Toyota Prius,	Jan. 1998	Declaration Ex.
	Automotive Engineering		
	International		
1139	60/100095 Provisional Application	Filed Sept. 11,	Declaration Ex.
		1998	
1140	Dr. Davis Reply Declaration		Davis Reply
1141	Deposition Transcript of Mr.	April 7-8, 2015	Hannemann Dep.
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