

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. 7,455,134 to Severinsky *et al.*
IPR Case No. IPR2014-00568

**DECLARATION OF DR. JEFFREY L. STEIN IN SUPPORT OF
PETITION FOR *INTER PARTES* REVIEW UNDER
35 U.S.C. § 311 *ET SEQ.* AND 37 C.F.R. § 42.100 *ET SEQ.*
(CLAIMS 1-3, 5, 6, 19, 20, 26, 27, 40, 58 AND 62 OF U.S. PATENT NO.
7,455,134)**

TABLE OF CONTENTS

I.	INTRODUCTION	5
A.	Engagement	5
B.	Background and Qualifications	5
C.	Compensation and Prior Testimony	8
D.	Materials and Information Considered.....	8
II.	LEGAL STANDARDS FOR PATENTABILITY	9
A.	General	9
B.	Priority Dates for Claimed Subject Matter.....	10
C.	Claim Construction Standard	11
D.	Anticipation	12
E.	Obviousness.....	13
III.	THE PERSON OF ORDINARY SKILL IN THE RELEVANT FIELD AND IN THE RELEVANT TIMEFRAME.....	17
IV.	STATE OF THE ART AS OF 2001.....	19
A.	HEV Architecture.....	19
1.	Series HEVs	20
2.	Parallel HEVs.....	21
3.	Series-Parallel HEVs	22
B.	Controls	24
C.	Electrical Characteristics.....	26
V.	THE '134 PATENT	27

A.	Background of the '134 Patent.....	27
B.	Prosecution History of the '134 Patent	33
C.	Construction of Terms in the Challenged Claims	34
D.	Effective Filing Date of the Challenged Claims	35
1.	The '134 Patent's Priority Claim	35
2.	Introduction of New Subject Matter on April 2, 2001 Under "Further Improvements According to the Continuation-in-Part"	37
3.	The Max Voltage-to-Current Ratio Limitation is Unsupported Prior to April 2, 2001	40
4.	No Ratios Are Disclosed in Applications Preceding CIP.....	43
5.	No Voltage Values Under Load Are Described in Applications Preceding CIP	44
6.	Even A Deduced Ratio From Pre-CIP Applications Does Not Support " <i>at least 2.5</i> "	46
7.	April 2, 2001: The Effective Filing Date of All Challenged Claims	50
VI.	PATENTABILITY ANALYSIS OF THE CHALLENGED CLAIMS.....	51
A.	Overview of the Prior Art.....	51
1.	PCT Publication No. WO00/015455	51
2.	U.S. Patent No. 5,586,613 ("Ehsani")	54
B.	Ground 1A: The '455 PCT publication Teaches All the Limitations in Claims 1-3, 5, 19, 20, 26, 27, 40, 58 and 62 of the '134 Patent.....	55
1.	Claim 1	58
2.	Claim 2	70

3.	Claim 3	71
4.	Claim 5	72
5.	Claim 19	72
6.	Claim 20	76
7.	Claim 26	78
8.	Claim 27	79
9.	Claim 40	80
10.	Claim 58	82
11.	Claim 62	90
C.	Ground 1B: Claims 1-3, 5, 19, 20, 26, 27, 40, 58 and 62 Are Obvious Over the '455 PCT Publication	91
D.	Ground 2: The Combination of the '455 PCT Publication and Ehsani Teaches the Limitations in Claim 6.....	91
1.	Analysis.....	91
2.	Rationale to Combine The '455 PCT Publication and Ehsani.....	94
3.	Non-obviousness factors	95
VII.	CONCLUSION.....	97
	APPENDICES TO DECLARATION OF DR. JEFFREY L. STEIN	98

I. INTRODUCTION

A. Engagement

1. My name is Jeffrey L. Stein. I have been retained by counsel for Ford Motor Company (“Ford”) as an expert witness in the above-captioned proceeding. I have been asked to provide analysis and my opinion about the state of the art of the technology described in U.S. Patent No. 7,455,134 (“the ’134 patent,” FMC 1001) and on the patentability of claims 1-3, 5, 6, 19, 20, 26, 27, 40, 58 and 62 (“the challenged claims”) of the ’134 patent.

B. Background and Qualifications

2. I am currently a Professor of Mechanical Engineering at the University of Michigan, Ann Arbor Campus, and the former Associate Director of the Automotive Research Center at the University of Michigan. I have studied, taught and/or practiced in the relevant hybrid electric vehicle (HEV) control technology for over 20 years.

3. I received my Ph.D. degree in Mechanical Engineering from Massachusetts Institute of Technology in 1983. I received a Masters of Science degree in Mechanical Engineering and a Bachelors of Science degree in Mechanical Engineering from Massachusetts Institute of Technology in 1976.

4. In my capacity as a Professor, I teach undergraduate and graduate courses in mechanical design, dynamics, systems and control engineering. In my capacity as a Professor, I also do research in the area of automotive system design

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