

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

YITA LLC
Petitioner

v.

MACNEIL IP LLC
Patent Owner

Case No. IPR2020-01139
Patent No. 8,382,186

**DECLARATION OF PAUL E. KOCH, PH.D. IN SUPPORT OF
PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT 8,382,186**

Mail Stop "PATENT BOARD"
Patent Trial and Appeal Board
U.S. Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

TABLE OF CONTENTS

I.	Introduction.....	1
II.	Qualifications and Experience.....	1
III.	Legal Principles	4
	A. Obviousness.....	4
	B. Motivation to Combine	7
IV.	Level of Ordinary Skill in the Art	9
V.	State of the Art.....	10
	A. Thermoforming Generally.....	10
	B. Various methods to control or limit thinning during thermoforming.....	16
	C. Many prior art floor mats were thermoformed	23
	D. Prior art floor mats were made to closely conform to vehicle sidewalls	29
	E. Prior art floor mats had a reservoir	35
	F. The Use of Hollow Baffles to Elevate the Vehicle Occupant’s Feet above the Water Collected in the Reservoir Was not New	39
VI.	Overview of the ’186 Patent.....	45
	A. The ’186 Patent Background.....	45
	B. The ’186 Patent Specification and Drawings.....	47
	C. ’186 Patent Challenged Claims	51
	D. Summary of the ’186 Patent’s Prosecution History	53
VII.	Claim Construction.....	58
	A. Legal Standard.....	58

B.	“thickness ... being substantially uniform throughout the tray”	59
VIII.	Summary of Grounds.....	61
IX.	Ground 1: Obviousness of Claims 1-7 Based on Rabbe (FR2547252) in view of Yung (U.S. Pre-Grant Publication No. 2002/0045029) and Gruenwald (“Thermoforming: A Plastics Guide”)	62
A.	Overview of Rabbe.....	62
B.	Overview of Yung	65
C.	Overview of Gruenwald	69
D.	Independent Claim 1	72
1.	Preamble: “A vehicle floor tray thermoformed from a sheet of thermoplastic polymeric material of substantially uniform thickness, comprising.....	90
2.	Element 1[a]: “a central panel substantially conforming to a floor of a vehicle foot well”	92
3.	Element 1[b]: “the central panel of the floor tray having at least one longitudinally disposed lateral side and at least one transversely disposed lateral side”	94
4.	Element 1[c]: “a first panel integrally formed with the central panel of the floor tray, upwardly extending from the transversely disposed lateral side of the central panel of the floor tray, and closely conforming to a first foot well wall”	97
5.	Element 1[d]: “the first panel of the floor tray joined to the central panel of the floor tray by a curved transition”	99
6.	Element 1[e]: “a second panel integrally formed with the central panel of the floor tray and the first panel, upwardly extending from the longitudinally disposed lateral side of the central panel of the floor tray, and closely conforming to a second foot well wall”	102

Inter Partes Review of USPN 8,382,186
Declaration of Paul E. Koch, Ph.D.

7.	Element 1[f]: “the second panel of the floor tray joined to the central panel of the floor tray and to the first panel of the floor tray by curved transitions”	104
8.	Element 1[g]: “a reservoir disposed in the central panel of the floor tray”	106
9.	Element 1[h]: “a plurality of upstanding, hollow, elongate baffles disposed in the reservoir”	109
10.	Element 1[i]: “each of the baffles having at least two ends remote from each other”	113
11.	Element 1[j]: “the central panel, the first panel, the second panel, the reservoir and the baffles each having a thickness from a point on the upper surface to a closest point on the bottom surface thereof, said thicknesses, as a result of the tray being thermoformed from the sheet of thermoplastic polymeric material of substantially uniform thickness, being substantially uniform throughout the tray”	114
12.	Element 1[k]: “the baffles each having a width, in any horizontal direction, of more than two times its thickness”	116
13.	Element 1[l]: “the baffles adapted to elevate the shoe or foot of the occupant above fluid collected in the reservoir, and further adapted to impede lateral movement, induced by a change in vehicle speed or direction, of fluid collected in the reservoir”	118
14.	Element 1[m]: “any portion of the reservoir connected to a remote portion of the reservoir by a path formed around ends of the baffles”	120
15.	A POSA Would Have Been Motivated to Combine Rabbe, Yung, and Gruenwald and Arrived at the Claimed Vehicle Floor Tray	121
16.	Reasonable Expectation of Success	129

Inter Partes Review of USPN 8,382,186
Declaration of Paul E. Koch, Ph.D.

E.	Claim 2	131
F.	Claim 3	137
G.	Claim 4	143
H.	Claim 5	146
I.	Claim 6	148
J.	Claim 7	151
X.	Objective Indicia of Non-Obviousness	154
XI.	Conclusion	155

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.