

**Declaration of Melvin Ray Mercer in Support of Patent Owner  
Valmont Industries, Inc.'s Response to Petition regarding U.S. Patent**

**No. 7,003,357**

**Case IPR2015-01039**

**Mail Stop Inter Parties Review**

**Attn: Patent Trial and Appeal Board**

Commissioner for Patents

PO Box 1450

Alexandria, VA 22313-1450

Commissioner:

I, Melvin Ray Mercer, declare as follows:

## TABLE OF CONTENTS

I. INTRODUCTION .....	1
II. SUMMARY OF CONCLUSIONS .....	3
III. QUALIFICATIONS.....	3
IV. MATERIALS CONSIDERED.....	8
V. RELEVANT LEGAL STANDARDS.....	9
VI. PERSON OF ORDINARY SKILL IN THE ART .....	10
VII. TECHNOLOGY BACKGROUND .....	13
VIII. CLAIM CONSTRUCTION .....	15
A. “hand-held” device/RUI .....	15
IX. THE ’357 PATENT.....	17
X. THE PRIOR ART.....	18
A. Scott .....	18
B. Pyotsia .....	20
C. AIMS .....	23
D. Abts.....	26
XI. INSTITUTED GROUNDS .....	28
A. Ground 2: Scott, Pyotsia, and AIMS (Claims 1-3, 6-14, 17-18).....	28
1. A POSITA would not have Combined Scott with Pyotsia and AIMS .....	28
B. Ground 4: Scott, Pyotsia, and Abts (Claims 4, 5, 11, 15).....	38
1. Failure to Disclose Claimed Limitations.....	38
2. A POSITA would not have Combined Scott with Pyotsia and Abts.....	41
XII. CONCLUSION .....	44

## I. INTRODUCTION

1. My name is Melvin Ray Mercer, Professor Emeritus of Electrical and Computer Engineering at Texas A&M University. I am currently President of M. Ray Mercer and Associates, Inc., an independent consulting firm.

2. I have more than 47 years of dual industrial and academic experience in Electrical Engineering and Computer Engineering. I received a B.S. in Electrical Engineering from Texas Tech University in 1968, a Master of Science in Electrical Engineering from Stanford University in 1971, and a Doctor of Philosophy in Electrical Engineering from the University of Texas at Austin in 1980. Further, I have authored dozens of published technical papers and delivered many lectures addressing various aspects of Electrical and Computer Engineering. I founded Mercer and Associates, an independent consulting firm that I have owned and directed to this day, in 1984. Since that time, I have been providing private consultation and advice in Electrical and Computer Engineering to numerous entities, including IBM Corp., Rockwell International, Motorola Semiconductor, AT&T, Inc., and SigmaTel. Based on my below-described 47 years of dual industrial and academic experience in Electrical Engineering and Computer Engineering, and the acceptance of my publications and professional recognition by societies in my field, I believe that I am considered to be an expert in the field of real-time monitoring and control of electronically controllable processing systems.

3. I have been asked to provide an expert declaration on behalf of patent owner Valmont Industries, Inc. (“Valmont”). I understand that the petitioner in this case, Lindsay Corporation (“Lindsay” or “Petitioner”) assert that claims 1-18 of Valmont’s U.S. Patent No. 7,003,357 (the “’357 patent”) are obvious and anticipated in view of certain prior art, and that the Board instituted two obviousness grounds as to claims 1-15 and 17-18. I disagree with Lindsay’s contentions.<sup>1</sup>

4. I am submitting this declaration in opposition to Lindsay’s conclusions in this *inter partes* review proceeding. I reserve the right to supplement or amend this declaration should additional data or other information that affects my conclusions become available.

5. For my work in connection with this case, I am being compensated at \$650.00 per hour. My compensation is in no way contingent upon the outcome of the proceeding or the specifics of my testimony or conclusions.

6. I have been informed that Valmont owns US Patent No. 7,003,357 (“the ’357 patent”). I have no financial interest in Valmont or the ’357 patent, nor to my recollection have I ever had any contact with Valmont or the inventors of the ’357 patent.

---

<sup>1</sup> I understand that the Board instituted *inter partes review* as to all claims but claim 16, which I therefore do not address herein.

## II. SUMMARY OF CONCLUSIONS

7. For the reasons given below, I have concluded that: (1) claims 1-3, 6-14, and 17-18 of the '357 patent are not obvious in view of PCT Patent Application Publication No. WO 99/39567 to Scott et al. ("Scott"), U.S. Patent No. 7,010,294 to Pyotsia et al. ("Pyotsia"), and AIMS Telemetry Network Disclosed in "Irrigation Advances" ("AIMS"), as Petitioner proposes; and (2) claims 4, 5, 11 and 15 are not obvious in view of Scott, Pyotsia, and U.S. Patent No. 6,337,971 to Abts ("Abts"), as Petitioner proposes.

## III. QUALIFICATIONS

8. In this section of my declaration, I provide a brief summary of my qualifications to act as an expert in this matter. A copy of my current Curriculum Vitae is attached as **Exhibit A** (Ex. 2016), which contains a listing of my education and experience.

9. From 1968 to 1973, I was a Research/Development Engineer at General Telephone and Electronics Sylvania in Mountain View, California, during which time I also completed my M.S. in Electrical Engineering from Stanford University in 1971. During this period, I programmed minicomputer systems (predecessors to personal computers, smartphones, and modem servers) in machine language, assembly language, and various higher-level languages. I wrote simple Operating Systems, and most of the applications involved real-time processing as a significant aspect of the

# 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.