

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

APPLE INC.

Petitioner

v.

DSS TECHNOLOGY MANAGEMENT, INC.

Patent Owner

---

CASE IPR: Unassigned

Patent 6,128,290

---

**PETITION FOR *INTER PARTES* REVIEW  
OF U.S. PATENT NO. 6,128,290  
UNDER 35 U.S.C. §§ 311-319 and 37 C.F.R. §§ 42.1-.80, 42.100-.123**

**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.	MANDATORY NOTICES (37 C.F.R. § 42.8(a)(1)).....	2
	A. Real Party-In-Interest (37 C.F.R. § 42.8(b)(1)) .....	2
	B. Notice of Related Matters (37 C.F.R. § 42.8(b)(2)).....	2
	C. Designation of Counsel (37 C.F.R. § 42.8(b)(3)) .....	3
	D. Notice of Service Information (37 C.F.R. § 42.8(b)(4)) .....	3
III.	GROUND FOR STANDING (37 C.F.R. § 42.104(a)).....	3
IV.	PRECISE RELIEF REQUESTED (37 C.F.R. § 42.22(a)) .....	3
V.	THE '290 PATENT .....	4
	A. Overview of the '290 Patent.....	4
	B. Priority Date of the '290 Patent.....	5
	C. Level of Ordinary Skill in the Art .....	6
VI.	CLAIM CONSTRUCTION .....	6
	A. “local oscillator” .....	6
VII.	IDENTIFICATION OF CHALLENGE (37 C.F.R. § 42.104(b)).....	8
	A. Statutory Grounds for the Challenge.....	8
	B. Citation of Prior Art .....	9
	C. The Proposed Grounds Are Not Redundant.....	9
VIII.	GROUND OF REJECTION .....	11
	A. Ground 1: Claims 9 and 10 would have been obvious in view of Barber.....	11
	1. Overview of Barber.....	11
	2. Independent claim 9 would have been obvious in view of Barber. ....	13
	3. Claim 10 would have been obvious in view of Barber.....	23
	B. Ground 2: Claims 6, 7, 9, and 10 would have been obvious over Natarajan in view of Neve.....	24
	1. Overview of Natarajan .....	24
	2. Overview of Neve .....	26
	3. Overview of the Combination of Natarajan and Neve .....	27
	4. Independent claim 6 would have been obvious over Natarajan in view of Neve. ....	30

5.	Claim 7 would have been obvious over Natarajan in view of Neve. ....	41
6.	Independent claim 9 would have been obvious over Natarajan in view of Neve. ....	41
7.	Claim 10 would have been obvious over Natarajan in view of Neve. ....	51
C.	Ground 3: Claims 6 and 7 would have been obvious over Mahany. ....	51
1.	Overview of Mahany .....	51
2.	Independent claim 6 would have been obvious over Mahany. ....	52
3.	Claim 7 would have been obvious over Mahany. ....	60
IX.	CONCLUSION. ....	60

## TABLE OF AUTHORITIES

### Cases

<i>Alloc, Inc. v. Int’l Trade Comm’n</i> , 342 F.3d 1361 (Fed. Cir. 2003) .....	6
<i>Canon Inc. v. Intellectual Ventures I LLC</i> , IPR2014-00535, Paper 9 (P.T.A.B. Sept. 24, 2014) .....	10
<i>In re Cortright</i> , 165 F.3d 1353 (Fed. Cir. 1999) .....	6
<i>KSR International Co. v. Teleflex Inc.</i> , 550 U.S. 398 (2007) .....	30, 35
<i>Liberty Mutual Ins. Co. v. Progressive Casualty Ins. Co.</i> , CBM2012-00003, Paper 7 (P.T.A.B. Oct. 25, 2012) .....	10
<i>Phillips v. AWH Corp.</i> , 415 F.3d 1303 (Fed. Cir. 2005) .....	6

### Statutes

35 U.S.C. § 102(b) .....	9, 10, 11
35 U.S.C. § 102(e) .....	9, 11
35 U.S.C. § 103 .....	9, 11
35 U.S.C. § 325(d) .....	9

### Rules

37 C.F.R. § 42.10(b) .....	3
37 C.F.R. § 42.100(b) .....	6
37 C.F.R. § 42.104(a) .....	3
37 C.F.R. § 42.104(b) .....	8
37 C.F.R. § 42.106(a) .....	3
37 C.F.R. § 42.63(e) .....	3

37 C.F.R. § 42.8(a)(1).....	2
37 C.F.R. § 42.8(b)(1).....	2
37 C.F.R. § 42.8(b)(2).....	2
37 C.F.R. § 42.8(b)(3).....	3
37 C.F.R. § 42.8(b)(4).....	3

# 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.