

**UNITED STATES PATENT AND TRADEMARK OFFICE**

---

**BEFORE THE PATENT TRIAL AND APPEAL BOARD**

---

SONOS, INC.  
Petitioner

v.

D&M HOLDINGS US INC.  
Patent Owner

---

Case: To Be Assigned

Patent No. 6,473,441

---

**PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 6,473,441  
PURSUANT TO 35 U.S.C. §311 *et seq.* and 37 CFR §42.1 *et seq.***

**TABLE OF CONTENTS**

<b>I.</b>	<b><u>INTRODUCTION</u></b> .....	1
<b>II.</b>	<b><u>MANDATORY NOTICES UNDER 37 CFR §42.8</u></b> .....	1
<b>III.</b>	<b><u>STANDING TO FILE PETITION</u></b> <b><u>UNDER 37 CFR §§42.101 – 103</u></b> .....	3
<b>IV.</b>	<b><u>PETITION REQUIREMENTS UNDER 37 CFR §42.104</u></b> .....	5
<b>V.</b>	<b><u>REASONS FOR THE REQUESTED RELIEF</u></b> <b><u>UNDER 37 CFR §42.22</u></b> .....	11
	<b>A.</b> Overview of the ‘441 Patent.....	11
	<b>B.</b> The MPEG-2 Standard.....	15
	<b>C.</b> Identification of Challenges.....	23
	<b>1.</b> Challenge #1:.....	23
	<b>2.</b> Challenge #2:.....	24
	<b>3.</b> Challenge #3:.....	24
	<b>4.</b> Challenge #4:.....	25
	<b>D.</b> Challenge #1: Challenged Claims 1-4 Are Anticipated By Allen.....	30
	<b>E.</b> Challenge #2: Challenged Claims 1-4 Are Obvious Over Vishlitzky in View of MPEG-2.....	39
	<b>F.</b> Challenge #3: Challenged Claims 1-4 Are Obvious Over Wu in View of MPEG-2.....	52
	<b>G.</b> Challenge #4: Challenged Claim 3 Is Obvious over Any of Allen, the Combination of Vishlitzky and MPEG-2, and the Combination of Wu and MPEG-2, in View of Zhang.....	64
<b>V.</b>	<b><u>CONCLUSION</u></b> .....	65

## TABLE OF EXHIBITS

EXHIBIT	DESCRIPTION
SONOS 1001	U.S. Patent No. 6,473,441 to Dygert (“the ‘441 Patent”)
SONOS 1002	Sonos’s Complaint for <i>Sonos, Inc. v. D&amp;M Holdings Inc.</i> , Case No. 1:14-cv-01330-RGA (D. Del.)
SONOS 1003	Sonos’s First Amended Complaint for <i>Sonos, Inc. v. D&amp;M Holdings Inc.</i> , Case No. 1:14-cv-01330-RGA (D. Del.)
SONOS 1004	Sonos’s Second Amended Complaint for <i>Sonos, Inc. v. D&amp;M Holdings Inc.</i> , Case No. 1:14-cv-01330-RGA (D. Del.)
SONOS 1005	D&M’s first Answer to Sonos’s Second Amended Complaint for <i>Sonos, Inc. v. D&amp;M Holdings Inc.</i> , Case No. 1:14-cv-01330-RGA (D. Del.)
SONOS 1006	Selected portions of D&M’s Redacted Motion for Leave to Amend Their Answer to Assert Counterclaims for <i>Sonos, Inc. v. D&amp;M Holdings Inc.</i> , Case No. 1:14-cv-01330-RGA (D. Del.) (D.I. 83, dated 12/08/2015, but original unredacted version was filed as D.I. 81 on 11/30/2015)
SONOS 1007	Delaware District Court’s Order granting Motion to Leave to Amend Answer to Sonos’s Second Amended Complaint and severing D&M’s Counterclaims for <i>Sonos, Inc. v. D&amp;M Holdings Inc.</i> , Case No. 1:14-cv-01330-RGA (D. Del.)
SONOS 1008	Excerpt of case docket for <i>D&amp;M Holdings Inc. v. Sonos, Inc.</i> , Case No. 1:16-cv-00141 (D. Del.) (“Underlying Litigation”)
SONOS 1009	<i>TRW Automotive US LLC v. Magna Electronics, Inc.</i> , Case Nos. IPR2014-00293, IPR2014-00294, IPR2014-00296, IPR2014-00297, and IPR2014-00298
SONOS 1010	Dictionary Definitions from Microsoft Computer Dictionary (5th ed. 2002)
SONOS 1011	Dictionary Definitions from Rudolf F. Graf, <i>Modern Dictionary of Electronics</i> (7th ed. 1999)
SONOS 1012	Dictionary Definitions from Newnes <i>Dictionary of Electronics</i> (4th ed. 1999)

SONOS 1013	“Information Technology – Generic Coding of Moving Pictures and Associated Audio: Systems,” ISO/IEC 13818-1, April 1995 (“MPEG-2”)
SONOS 1014	U.S. Patent No. 5,892,535 to Allen (“Allen”)
SONOS 1015	U.S. Patent No. 5,737,747 to Vishlitzky (“Vishlitzky”)
SONOS 1016	“A Scalable Architecture for Video on Demand Servers,” Wu et al., <i>IEEE Transactions on Consumer Electronics</i> , Vol. 42, No. 4, November 1996 (“Wu”)
SONOS 1017	U.S. Patent No. 6,181,711 to Zhang (“Zhang”)
SONOS 1018	Expert Declaration of Anthony Wechselberger in support of this Petition

## **I. INTRODUCTION**

Pursuant to 35 U.S.C. §311 et seq. and 37 CFR §42.1 et seq., Sonos, Inc. (“Petitioner” or “Sonos”) hereby petitions the Patent Trial and Appeal Board (“PTAB”) to institute an *Inter Partes* Review (“IPR”) of Claims 1-4 of U.S. Patent No. 6,473,441 (“the ‘441 Patent”; SONOS 1001). The ‘441 Patent issued on October 29, 2002, resulting from U.S. Patent Application No. 09/226,169 (“the ‘169 Application”), filed on January 7, 1999. According to USPTO records, the ‘441 Patent is currently assigned to D&M Holdings US Inc. (“Patent Owner” or “D&M”).

This petition for *Inter Partes* Review (the “Petition”) demonstrates a reasonable likelihood that Petitioner will prevail with respect to Claims 1-4 of the ‘441 Patent (“the Challenged Claims”). 35 U.S.C. §314(a). Petitioner asserts that the Challenged Claims are anticipated by and/or obvious over the asserted prior art.

Pursuant to 37 CFR §42.22, Petitioner asks that the PTAB review the asserted prior art and below analysis, institute a trial for *Inter Partes* Review of the Challenged Claims, and cancel those claims as unpatentable.

## **II. MANDATORY NOTICES UNDER 37 CFR §42.8**

**Real Party-In-Interest – 37 CFR §42.8(b)(1):** Pursuant to 35 U.S.C. §312(a)(2), the real party-in-interest is Sonos, Inc., a corporation organized under the laws of the State of Delaware with a principal place of business at 614 Chapala Street, Santa Barbara, California 93101.

# 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.