UNITED STATES PATENT AND TRADEMARK OFFICE

_____

BEFORE THE PATENT TRIAL AND APPEAL BOARD

_____

HTC CORPORATION AND HTC AMERICA, INC.,
Petitioner,

v.

INVT SPE LLC,
Patent Owner.

_____

Cases IPR2018-01555 and IPR2018-01581
Patent 7,848,439 B2

_____

Before THU A. DANG, KEVIN F. TURNER, and
BARBARA A. BENOIT, *Administrative Patent Judges*.

BENOIT, *Administrative Patent Judge*.

ORDER
Conduct of the Proceeding
37 C.F.R. § 42.5

I. INTRODUCTION

We instituted *inter partes* review of U.S. Patent No. 7,848,439 B2 (Ex. 1001, "the '439 patent" or "the challenged patent")[1] in two proceedings—IPR2018-01555 ("IPR1555") and IPR2018-01581 ("IPR1581")—based on petitions filed by the same petitioner (HTC Corporation and HTC America, Inc., collectively "Petitioner"). ("IPR1581"). *See* IPR1555, Paper 8 ("IPR1555 Dec."), Paper 10; IPR1581, Paper 9 ("IPR1581 Dec."). The challenged patent is owned by INVT SPE LLC ("Patent Owner").

In IPR1555, we instituted review of claims 1–7 of the '439 patent on March 7, 2019 and, in a scheduling order issued the same day, we set an oral hearing for December 17, 2019 (among other due dates). *See generally* IPR1555 Dec.; IPR1555 Paper 9 (Scheduling Order). In IPR1581, we instituted review of independent claim 8 of the '439 patent on April 1, 2019 and, in a scheduling order issued the same day, we set an oral hearing for January 8, 2019 (among other due dates). *See generally* IPR1581 Dec.; IPR1555 Paper 10 (Scheduling Order).

II. THE CHALLENGES

The challenges brought by Petitioner in IPR1555 and IPR1581 have substantial similarities. The independent claims challenged in each proceeding have many identical limitations, as illustrated in the following chart that italicizes the limitations that are identical.

Claim 1 (Challenged in IPR1555)	Claim 8 (Challenged in IPR1581)
1. *A communication apparatus comprising: a channel estimating section that carries out a channel estimation per subband;*	8. *A communication apparatus comprising: a channel estimating section that carries out a channel estimation per subband;*

---

[1] The challenged patent is Exhibit 1001 in both IPR1555 and IPR1581.

a parameter deciding section that decides modulation parameters and coding parameters per subband group comprised of a plurality of the subbands, based on a result of the channel estimation per subband; *a parameter information transmission section that transmits, to a communicating party, parameter information indicating the modulation parameters and the coding parameters decided at the parameter deciding section;* *a receiving section that receives a signal containing data modulated and encoded on a per subband group basis at the communicating party using the modulation parameters and the coding parameters of the parameter information transmitted at the parameter information transmission section;* *a data obtaining section that demodulates and decodes the received signal received at the receiving section on a per subband group basis using the modulation parameters and the coding parameters decided at the parameter deciding section, and obtains the data contained in the received signal;* and	*a parameter deciding section that decides modulation parameters and coding parameters per subband group comprised of a plurality of the subbands based on a result of the channel estimation per subband;* *a parameter information transmission section that transmits to a communicating party, parameter information indicating the modulation parameters and the coding parameters decided at the parameter deciding section;* *a receiving section that receives a signal containing data modulated and encoded per subband group at the communicating party, using the modulation parameters and coding parameters of the parameter information transmitted at the parameter information transmission section;* and *a data obtaining section that demodulates and decodes the received signal received at the receiving section on a per subband group basis, using the modulation parameters and the coding parameters decided at the parameter deciding section, and obtains the data contained in the received signal;*
a pattern storage section that stores in advance patterns for selecting subbands constituting the subband groups wherein the parameter deciding section decides the modulation parameters and the coding parameters per subband group comprised of the subbands selected based on the patterns stored in the pattern storage section.	wherein the parameter deciding section decides the coding parameters in such a manner that a number of information bits obtained by assigning a weight per subband group to a sum of information bits that are able to be assigned to all of the subbands within the subband group, is assigned to the subband group.

See Ex. 1001, 12:65–13:27 (claim 1), 13:65–14:26 (claim 8).

Furthermore, Petitioner applies the following prior art[2] in each proceeding:

> U.S. Patent No. 6,904,283 B2, filed April 17, 2001, issued June 7, 2005 (Ex. 1003, "Li");
>
> U.S. Patent No. 7,221,680 B2, filed September 1, 2004, issued May 22, 2007 (Ex. 1004, "Vijayan"); and
>
> U.S. Patent No. 6,721,569 B1, filed September 29, 2000, issued April 13, 2004 (Ex. 1005, "Hashem").

---

[2] The same exhibit numbers are used for these references in both IPR1555 and IPR1581.

In IPR1581, Petitioner also asserts the following reference:

U.S. Patent No. 5,596,604, filed August 17, 1993, issued
January 21, 1997 (Ex. 1006, "Cioffi").

More particularly, the asserted ground at issue in IPR1555 is whether
claims 1–7 are unpatentable as obvious under 35 U.S.C. § 103 over Li,
Vijayan, and Hashem. The asserted ground at issue in IPR1581 is whether
independent claim 8 of the '439 patent as unpatentable under 35 U.S.C.
§ 103 over Li, Vijayan, Hashem, and Cioffi. IPR1581 Dec. 7–8.

In IPR1581, Petitioner cites to Cioffi as teaching using weighting per
subchannel in combination with the cluster groups taught by Li and subband
groups taught by Vijayan as teaching or suggesting limitation the wherein
limitation recited in independent claim 8 but not recited in independent
claim 1: "wherein the parameter deciding section decides the coding
parameters in such a manner that a number of information bits obtained by
assigning a weight per subband group to a sum of information bits that are
able to be assigned to all of the subbands within the subband group, is
assigned to the subband group." IPR1581 Dec. 36 (citing Pet. 30).

Petitioner also relies on declaration testimony by Dr. Zhi Ding
(Exhibit 1007[3]) in both IPR1555 and IPR1581.

As noted in our Scheduling Order issued in IPR1581 (Paper 10),
Patent Owner has the option to receive preliminary guidance from the Board
on a motion to amend filed in that proceeding. *See Notice Regarding a New
Pilot Program Concerning Motion to Amend Practice and Procedures in
Trial Proceedings under the America Invents Act before the Patent Trial and*

---

[3] The same exhibit number is used in both IPR1555 and IPR1581.

Appeal Board, 84 Fed. Reg. 9497 (Mar. 15, 2019) ("MTA Pilot Program

Notice"). In that Scheduling Order, we referred the parties to the Board's

Guidance on Motions to Amend in view of *Aqua Products*

(https://go.usa.gov/xU6YV), and *Lectrosonics, Inc. v. Zaxcom, Inc.*, Case

IPR2018-01129 (Paper 15) (PTAB Feb. 25, 2019) (precedential). The MTA

Pilot Program Notice does not automatically apply to IPR1555.

III. CONFERENCE CALL WITH THE PARTIES

A conference call took place on April 10, 2019 between Judges Dang,

Turner, and Benoit and respective counsel for Patent Owner and Petitioner.

The purpose of the call was to discuss ways in which IPR1555 and IPR1581

could be consolidated or otherwise conducted in light of the significant

overlap of the proceedings.

Both parties agreed that this proceeding should proceed according to

due dates in the IPR1581 scheduling order (IPR1581, Paper 10) and that a

consolidated oral argument (if requested) should be held to address issues in

IPR1555 and IPR1581. We agreed with the parties and, on April 11, 2019,

issued a revised scheduling order for IPR1555 setting the dates according to

due dates in IPR1581. IPR1555, Paper 12.

The parties also recommended that, other than following the IPR1581

schedule and consolidating the depositions of declarants to be used in both,

the proceedings not be consolidated and that separate records be maintained

for each proceeding. The parties subsequently reported that they were

unable to agree on how Motions to Amend, if any, were to be handled in any

consolidated proceeding.

DOCKET ALARM

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.

fastcase®
Smarter legal research.