

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

FREEBIT AS,  
Petitioner,

v.

BOSE CORPORATION,  
Patent Owner.

---

Case IPR2017-01309  
Patent 9,036,853 B2

---

Before KRISTEN L. DROESCH, BRYAN F. MOORE, and  
JAMES B. ARPIN, *Administrative Patent Judges*.

MOORE, *Administrative Patent Judge*.

DECISION  
Denying Institution of *Inter Partes* Review  
*37 C.F.R. § 42.108*

I. INTRODUCTION

Freebit AS (“Petitioner”) requests *inter partes* review of claims 1–3, 5, 6, 8–11, and 13 of U.S. Patent No. 9,036,853 B2 (“the ’853 patent,” Ex. 1001) pursuant to 35 U.S.C. §§ 311 *et seq.* Paper 1 (“Pet.”). Bose

Corporation (“Patent Owner”) filed a Preliminary Response. Paper 6 (“Prelim. Resp.”). Petitioner filed an authorized Reply to the Preliminary Response. Paper 7. Institution of an *inter partes* review is authorized by statute when “the information presented in the petition . . . and any response . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a); *see* 37 C.F.R. § 42.108. Upon consideration of the Petition, Preliminary Response, the Reply, and the supporting evidence; we conclude the information presented shows there is not a reasonable likelihood that Petitioner would prevail in establishing the unpatentability of claims 1–3, 5, 6, 8–11, and 13 of the ’853 patent.

#### *A. Related Matters*

IPR petitions have been filed against U.S. Patent No. 8,311,253 (IPR2017-01307) and U.S. Patent No. 8,254,621 (IPR2017-01308), each of which share a common specification with the ’853 patent. Paper 4, 2.

#### *B. Overview of the Anatomy of a Human Ear*

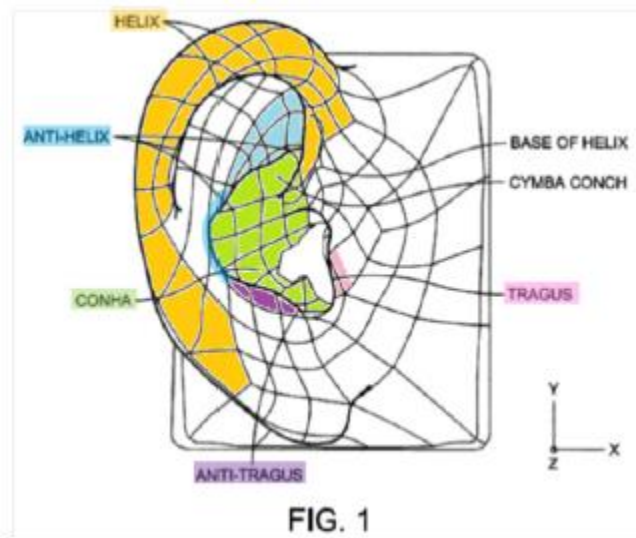
Patent Owner provides an overview of the anatomy of the human ear. Because the challenged claims describe an earpiece with respect to its engagement of the ear. Although Patent Owner acknowledges that human ears may differ in size and geometry and the features discussed below may be more or less prominent in any particular individual, it is helpful to understand the basic anatomy of the human ear when considering the recited device. Prelim. Resp. 4.

A human ear is composed of three main parts: the outer ear, the middle ear and the inner ear. The outer ear is made up of the cartilaginous pinna (or auricle) which funnels airborne sound

waves through an opening, the external auditory meatus, into the auditory canal. The anterior surface of the cartilaginous pinna is irregularly concave and presents numerous projections, depressions and other features.

*Id.* at 4.

Figure 1 of the '853 patent, as annotated by Patent Owner, reproduced below.



*Id.* at 5.

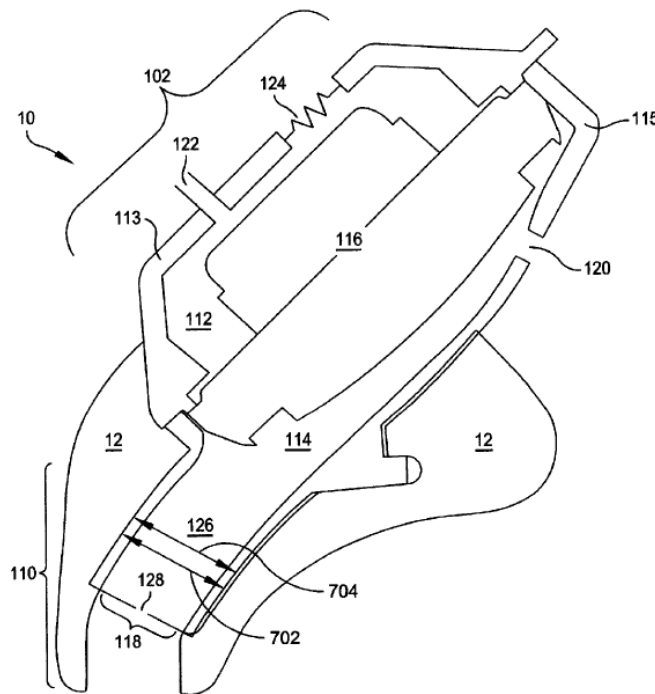
As illustrated, the helix is a curled rim that extends around the outer circumference of the rear edge of the pinnae from the ear lobe to the base of helix, also known as the crus of helix. The anti-helix is a generally ridge-like structure that curves generally concentric with and is positioned frontal to the helix on the anterior surface of the pinna. Extending from an inferior portion of the crus (located at its top) to the anti-helix-antitragus notch (at its bottom), the anti-helix includes a curve around the upper and rearward portions of a concave cavity, called the concha. The tragus is the name given to the cartilaginous and typically stiff flap protruding outward in front of part of the concha, just forward of the exterior auditory meatus (not shown in the figure). The antitragus is a cartilaginous protrusion formed at a lower end of the anti-helix opposite the tragus and separated from it by a

notch. The antitragus is located above the ear lobe at the bottom of the pinnae.

*Id.* at 5–6 (emphasis added).

### *B. The '853 Patent*

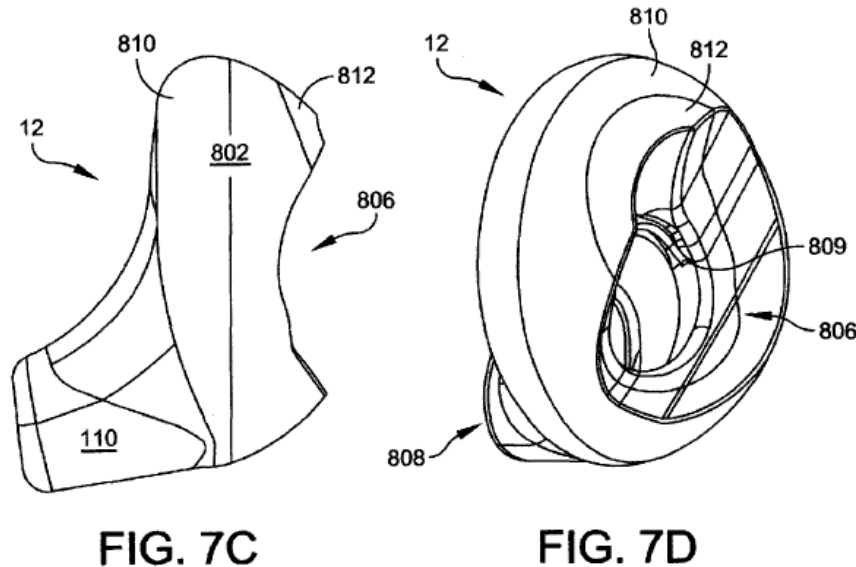
The '853 patent “describes a positioning and retaining structure for an earpiece.” Ex. 1001, 1:18–19. The '853 patent describes in-ear earpiece 10 including body 12 with outlet section 15 dimensioned and arranged to fit inside a user’s ear canal entrance, passageway 18 for conducting the acoustic energy from the audio module to an opening in the outlet section, and positioning and retaining structure 20. Ex. 1001, 1:28–36, 4:51–55, Figs. 2, 6. Figure 6, reproduced below, shows acoustic driver module 14 and body 12.



**FIG. 6**

Figure 6 above shows a cross-section of acoustic driver module 14 that may be coupled to an electronics module 16 for receiving incoming audio signals from an external source.

Figures 7C and 7D, reproduced below, show two views of the in-ear earpiece body 12.



As shown above in Figures 7C and 7D, body 12 may have outlet section 15, with nozzle 126 arranged therein, that fits into the ear canal via lower portion 110.

The '853 patent describes “a positioning and retaining structure 20 that, together with the body 12 holds the earpiece in position without the use of ear hooks, or so-called ‘click lock’ tips, which may be unstable (tending to fall out of the ear), uncomfortable (because they press against the ear), or ill fitting (because they do not conform to the ear).” Ex. 1001, 5:28–34.

Figure 2, reproduced below, shows several views of the retaining structure 20.

# 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.