

# Folded Horn Acoustic Guitar Patent # 10,777,172

(12) **United States Patent**  
**Katzenberger**

(10) **Patent No.:** **US 10,777,172 B1**

(45) **Date of Patent:** **Sep. 15, 2020**

---

(54) **FOLDED HORN ACOUSTIC GUITAR**

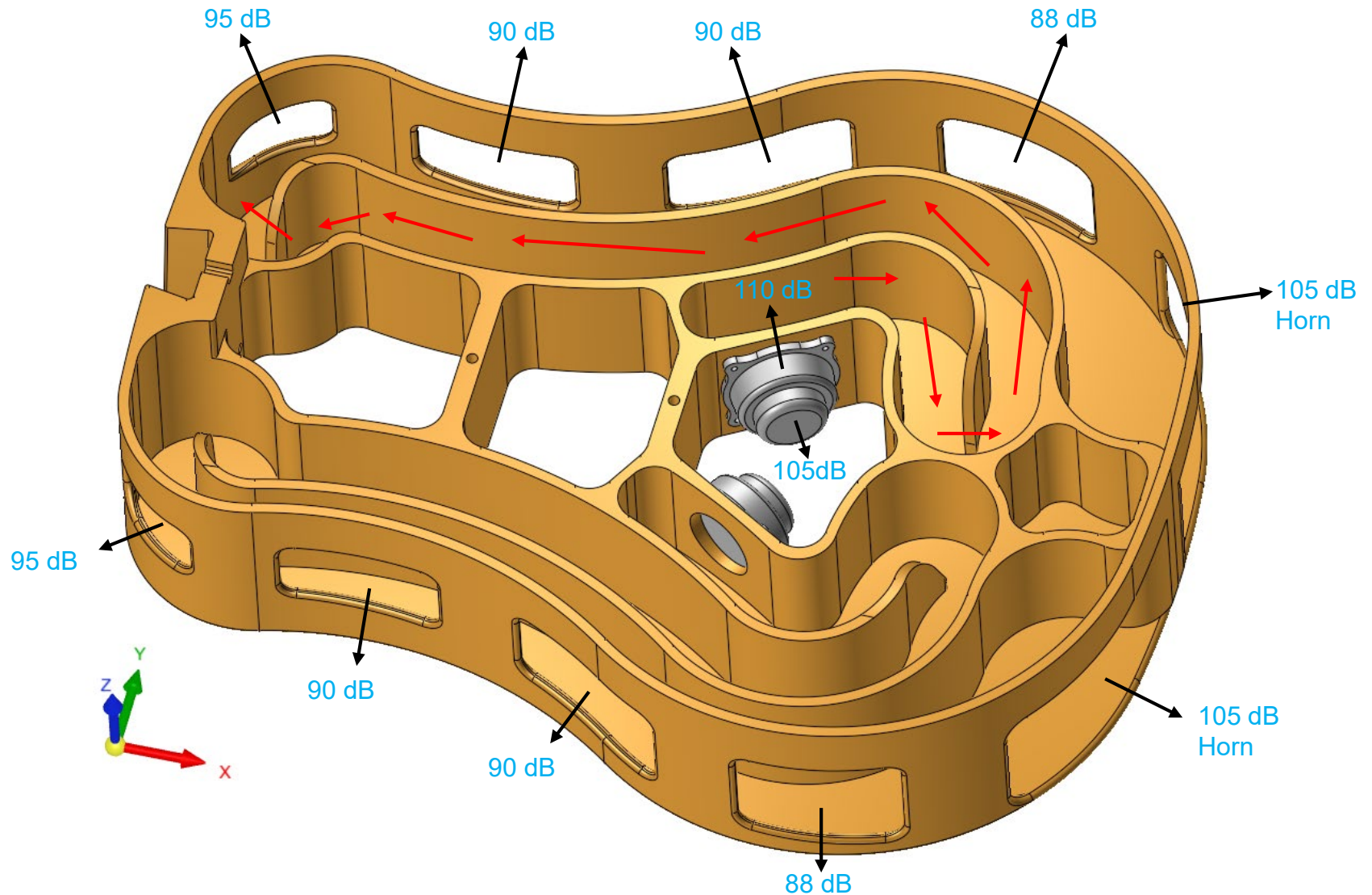
(71) Applicant: **Joseph J. Katzenberger**,  
Crawfordsville, IN (US)

(72) Inventor: **Joseph J. Katzenberger**,  
Crawfordsville, IN (US)

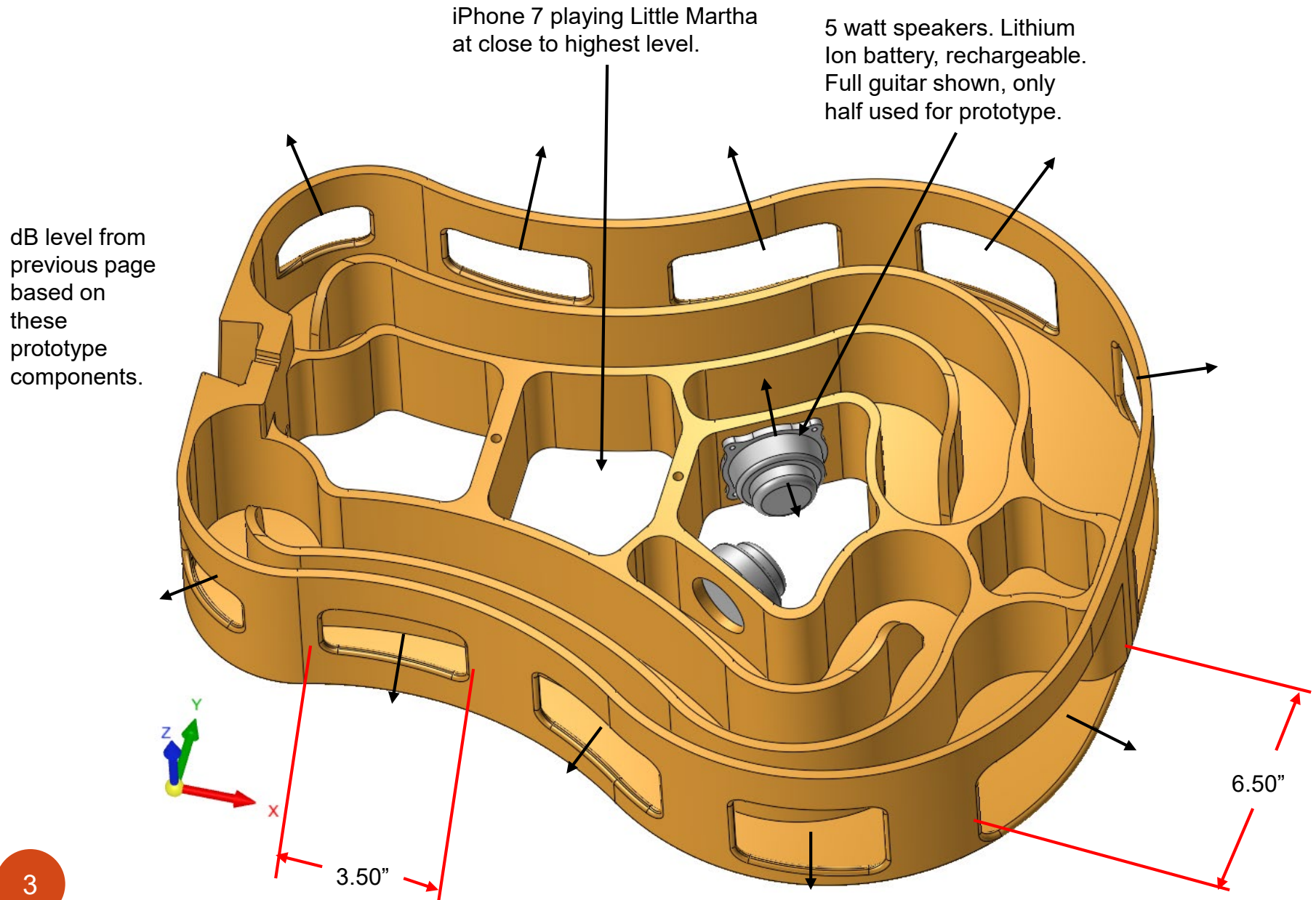
(73) Assignee: **Joseph J. Katzenberger**,  
Crawfordsville, IN (US)

4,987,815 A	1/1991	Shockley
5,208,410 A	5/1993	Foley
5,333,527 A	8/1994	Janes
5,461,958 A	1/1995	Dresdner
5,442,986 A	8/1995	Cota
5,549,027 A	8/1996	Steinberger
5,567,896 A	10/1996	Gottschall
5,661,252 A	8/1997	Krawczak
5,682,003 A	10/1997	Jarowsky
4,995,293 A	11/1999	Anderson
6,040,510 A	3/2000	Yuan
6,124,536 A	9/2000	Hoshino
6,646,101 B1	11/2003	Martin

# Folded Horn Acoustic Guitar Patent # 10,777,172



# Folded Horn Acoustic Guitar Patent # 10,777,172



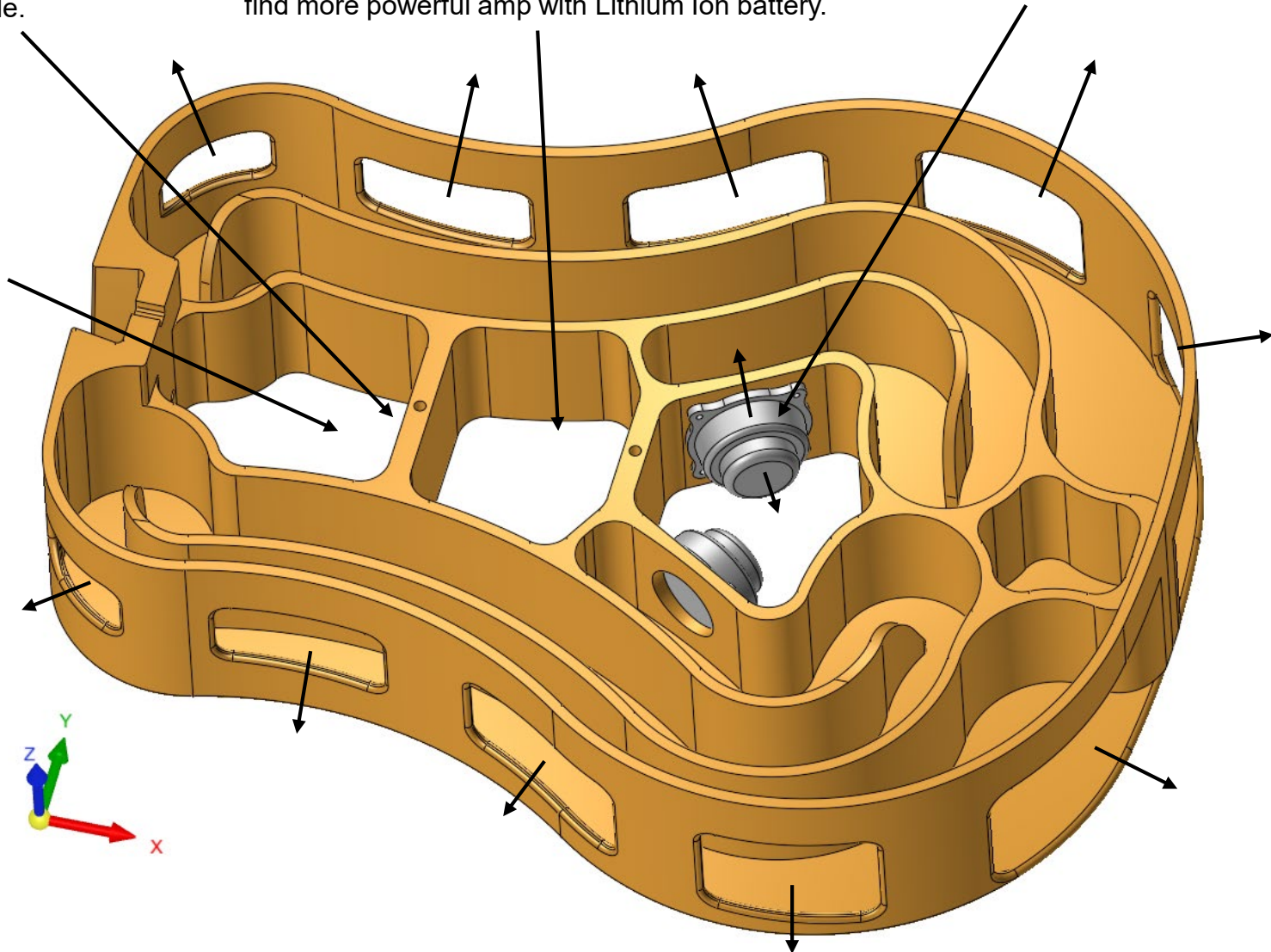
# Folded Horn Acoustic Guitar Patent # 10,777,172

Battery powered 3 watt mini and 5 watt mini amp available. Not enough power. 50 watt small amp available, but needs to plug in. Need to find more powerful amp with Lithium Ion battery.

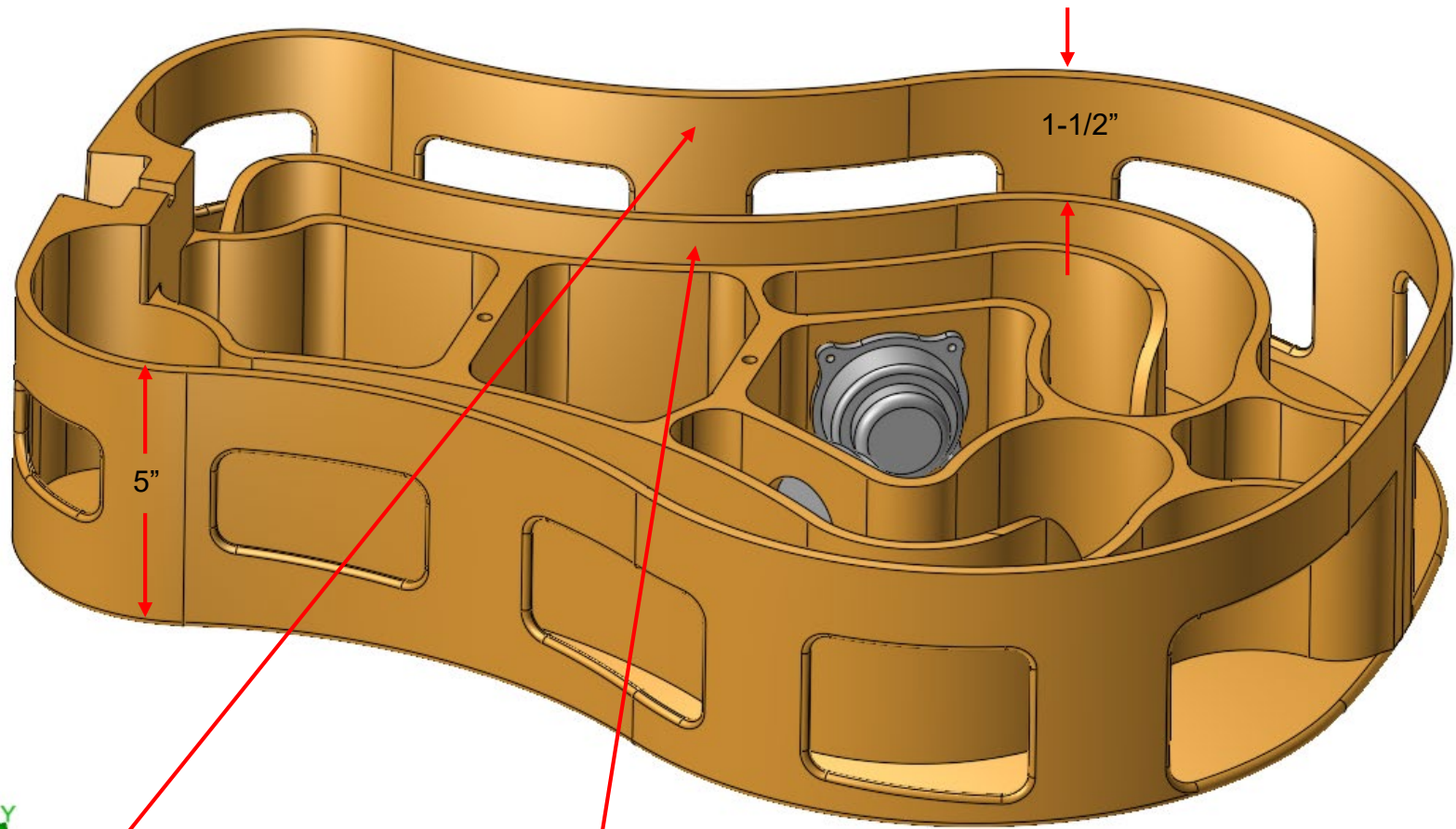
20 watt speakers also available.

iRig acoustic condenser mic available.

Equalizer required.



# Folded Horn Acoustic Guitar Patent # 10,777,172



Note that dB level down inside the folded horn is approx. 10 dB higher than any area above the folded horn.

## Folded Horn Acoustic Guitar Patent # 10,777,172



Two 3" pieces of hard maple glued and clamped.