



US 20220399870A1

(19) **United States**(12) **Patent Application Publication**  
**Hasanovic**(10) **Pub. No.: US 2022/0399870 A1**(43) **Pub. Date: Dec. 15, 2022**(54) **SYSTEMS AND METHODS FOR  
FREQUENCY EQUALIZATION AND  
TEMPERATURE COMPENSATION IN  
RADIO FREQUENCY DEVICES****Publication Classification**

(51) **Int. Cl.**  
*H03H 7/38* (2006.01)  
*H03H 7/54* (2006.01)  
*H04B 3/14* (2006.01)

(52) **U.S. Cl.**  
CPC ..... *H03H 7/383* (2013.01); *H03H 7/54*  
(2013.01); *H04B 3/144* (2013.01)

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(US)(21) Appl. No.: **17/777,560**(22) PCT Filed: **Nov. 17, 2020**(86) PCT No.: **PCT/US2020/060842**

§ 371 (c)(1),

(2) Date: **May 17, 2022**(57) **ABSTRACT**

A frequency equalizer is provided. The frequency equalizer includes a coupler including a main segment extending between a first port and a second port and a coupled segment disposed in a coupling relationship with the main segment and extending between a third port and a fourth port. The frequency equalizer further includes a first thermistor electrically coupled in series between the first port and an input line, a second thermistor electrically coupled in series between the second port and an output line, and a first shunt resistor coupled across the third port. The frequency equalizer simultaneously provides frequency equalization and temperature compensation for signals transmitted through the frequency equalizer.

**Related U.S. Application Data**

(60) Provisional application No. 62/936,720, filed on Nov. 18, 2019.

