US 20220393661A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2022/0393661 A1**

Ylilammi et al. (43) **Pub. Date: Dec. 8, 2022**

(54) **TWO-STAGE LATERAL BULK ACOUSTIC WAVE FILTER WITH CAPACITIVE COUPLING OF COUNTER ELECTRODE**

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(21) Appl. No.: **17/771,301**

(22) PCT Filed: **Oct. 22, 2020**

(86) PCT No.: **PCT/EP2020/079841**

§ 371 (c)(1),
(2) Date: **Apr. 22, 2022**

Related U.S. Application Data

(60) Provisional application No. 62/924,349, filed on Oct. 22, 2019.

Publication Classification

(51) **Int. Cl.**

H03H 9/13	(2006.01)
H03H 9/52	(2006.01)
H03H 9/17	(2006.01)
H03H 9/02	(2006.01)

(52) **U.S. Cl.**

CPC ***H03H 9/13*** (2013.01); ***H03H 9/52*** (2013.01); ***H03H 9/17*** (2013.01); ***H03H 9/0211*** (2013.01)

(57) **ABSTRACT**

An acoustic wave filter device with two-stage acoustic wave filters is provided. Each of the two stages includes a respective acoustic wave filter element. A first acoustic wave filter element (**100***a*) includes a first input electrode (**150***a*), a first output electrode (**174***a*), and a first counter electrode (**120***a*). The first input electrode and the first output electrode are located on a top surface of piezoelectric layer (**650**), and the first counter electrode is located on a bottom surface of the piezoelectric layer. A second acoustic wave filter element (**100***b*) includes a second input electrode (**154***b*), a second output electrode (**174***b*), and a second counter electrode (**120***b*). The second input electrode and the second output electrode are located on the top surface of the piezoelectric layer, and the second counter electrode is located on a bottom surface of the piezoelectric layer. The two acoustic wave filter elements are connected in series through a common floating electrode (**602**).