

US 20240235528A9

(19) United States

(12) **Patent Application Publication Ebihara et al.**

(10) Pub. No.: US 2024/0235528 A9

(48) **Pub. Date:** Jul. 11, 2024 CORRECTED PUBLICATION

(54) LADDER-TYPE FILTER, AND DUPLEXER AND MODULES WITH LADDER-TYPE FILTER

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(21) Appl. No.: 18/490,544

(22) Filed: Oct. 19, 2023

Prior Publication Data

(15) Correction of US 2024/0137007 A1 Apr. 25, 2024See (22) Filed.See (30) Foreign Application Priority Data.

(65) US 2024/0137007 A1 Apr. 25, 2024

(30) Foreign Application Priority Data

Oct. 20, 2022 (JP) 2022-168654

Publication Classification

(51) Int. Cl. H03H 9/70 (2006.01) H03H 9/64 (2006.01) H03H 9/72 (2006.01) H04B 1/20 (2006.01)

(52) **U.S. Cl.** CPC *H03H 9/706* (2013.01); *H03H 9/6483*

(2013.01); *H03H 9/725* (2013.01); *H04B 1/20*

(2013.01)

(57) ABSTRACT

A ladder-type filter includes a plurality of series arms and a plurality of parallel arms, in which one of the parallel arms does not have resonance characteristic is arranged in parallel between two series arm resonators of the plurality of series arms. The ladder-type filter may be included in a duplexer and/or a module.

