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**MIMURA**(10) **Pub. No.: US 2022/0360247 A1**(43) **Pub. Date: Nov. 10, 2022**(54) **ELASTIC WAVE DEVICE****H03H 3/10** (2006.01)**H03H 9/25** (2006.01)**H03H 9/10** (2006.01)(71) Applicant: **Murata Manufacturing Co., Ltd.**,  
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**ABSTRACT**

An elastic wave device includes an interdigital transducer electrode, a dielectric film, and a frequency adjustment film are disposed on a LiNbO<sub>3</sub> substrate. When Euler Angles of the LiNbO<sub>3</sub> substrate are within a range of about 0°±5°, within a range of about θ±1.5°, within a range of about 0°±10°, the interdigital transducer electrode includes a main electrode, a film thickness of the main electrode normalized by a wavelength determined in accordance with an electrode finger pitch of the interdigital transducer electrode is denoted as T, and a density ratio of a material of the main electrode to Pt is denoted as r, the film thickness of the main electrode and θ of the Euler Angles satisfy  $\theta = -0.05^\circ / (T/r - 0.04) + 31.35^\circ$ .

