



US 20240237281A1

(19) **United States**(12) **Patent Application Publication**
Tsai(10) **Pub. No.: US 2024/0237281 A1**(43) **Pub. Date: Jul. 11, 2024**(54) **LIQUID-TIGHT STRUCTURE WITH A
FASTENER COMPONENT**(52) **U.S. Cl.**CPC *H05K 7/20272* (2013.01); *F16J 15/021*
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ABSTRACT(72) Inventor: **Po-Cheng Tsai**, New Taipei City (TW)(21) Appl. No.: **18/151,833**(22) Filed: **Jan. 9, 2023**

A liquid-tight structure includes a stepped fastener having a first shank and a second shank. The stepped fastener is threadingly engaged with an opening that includes a first step and a second step. A first diameter of the first shank is larger than a second diameter of the second shank. The liquid-tight structure includes a first seal seated on and in physical communication with a first top surface of the first step of the opening. The first seal is compressed between a first side of the opening and the first shank. The liquid-tight structure includes a second seal seated on and in physical communication with a second top surface of the second step of the opening. The second seal is compressed between a second side of the opening and the second shank.

Publication Classification(51) **Int. Cl.***H05K 7/20* (2006.01)*F16J 15/02* (2006.01)*G06F 1/20* (2006.01)