



US 20240251681A1

(19) **United States**

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

(10) **Pub. No.: US 2024/0251681 A1**

(43) **Pub. Date: Jul. 25, 2024**

(54) **CERAMIC STACK ASSEMBLY FIXTURE**

B32B 37/00 (2006.01)

B32B 37/10 (2006.01)

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

CPC **H10N 30/057** (2023.02); **B06B 1/0611**
(2013.01); **B32B 37/0046** (2013.01); **B32B**
37/10 (2013.01); **B06B 2201/74** (2013.01);
B32B 2311/12 (2013.01); **B32B 2315/02**
(2013.01); **B32B 2457/00** (2013.01)

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(21) Appl. No.: **18/394,433**

(22) Filed: **Dec. 22, 2023**

Related U.S. Application Data

(60) Provisional application No. 63/440,553, filed on Jan.
23, 2023.

Publication Classification

(51) **Int. Cl.**

H10N 30/057 (2006.01)

B06B 1/06 (2006.01)

(57)

ABSTRACT

Provided is a fixture for concentrically aligning and assembling a Ceramic Stack Assembly transducer during manufacturing. The CSA fixture comprises a base, a top compression cap, a central rod and a fastener, one or more alignment posts, and a driving wedge. The base further includes a groove to accept and align a transducer rear-centering ring at a central axis of the fixture. The transducer rear-centering ring supports one or more copper foil or ceramic rings during assembly. The alignment posts and driving wedge apply radial pressure to the copper foil or ceramic rings during assembly to force concentric alignment. The top compression cap, central rod, and fastener compress and stress the CSA Ceramic once assembled. The fixture simultaneously provides concentric alignment, foil alignment and provides a mechanism for stressing the CSA. A method of use is also provided.

