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Duran Ariza

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(54) **GASKET AND DROP SEAL ASSOCIATED WITH ACOUSTIC PANEL CAPABLE OF IMPEDING FLOW OF SOUND INTO CAVITY OF DROP SEAL**

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(58) **Field of Classification Search**

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(56) **References Cited**

U.S. PATENT DOCUMENTS

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3,072,975 A * 1/1963 Burmeister *E04B 2/827*
105/155
3,253,552 A * 5/1966 Stein *B61F 11/00*
104/94

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FOREIGN PATENT DOCUMENTS

JP 06057835 A * 3/1994
JP 2000257349 A * 9/2000

(Continued)

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(57) **ABSTRACT**

The invention(s) disclosed herein include(s) various panels, components of panels, partitions, systems, and/or methods that increase acoustic insulation. For example, some embodiments include a movable partition where the interface between two panels includes various gaskets, damping elements, and/or perforations that mitigate sound transmission from one side of the partition to the other. In one or more embodiments, the partition and/or panel(s) include one or more upper and/or lower drops seals having a gasket that significantly impedes sound from entering a window associated with the panel(s), which in some embodiments leads to a cavity/region relative to which the drop seal is retractable/extendable.

35 Claims, 29 Drawing Sheets

