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Shah et al.

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(54) **SYSTEM AND METHOD FOR IMPROVING IMPACT SAFETY**

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206/775-783; 428/15
See application file for complete search history.

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 523 days.

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(57) **ABSTRACT**

(51) **Int. Cl.**
G06F 1/16 (2006.01)
G06F 3/041 (2006.01)
(Continued)

A system for improving the impact safety and methods for manufacturing and using same. The system includes a panel that comprises a panel surface having a frangible region. The panel can be formed from a translucent material, such as glass. The frangible region is indistinguishable from the remainder of the panel during normal conditions but enables the panel to break in a safe, predictable manner when a predetermined amount of force is applied to the frangible region. Thereby, the panel does not shatter or form sharp shards. Instead, the frangible region breaks away from the panel as an intact unit without internal fracturing. Risk of personal injury thereby can be minimized. The lack of sharp shards likewise facilitates clean up and replacement of the broken panel. The panel advantageously can be applied in video monitors and emergency equipment such as fire extinguisher cabinets disposed aboard passenger vehicles and in stationary environments such as the home or office.

(52) **U.S. Cl.**
CPC **G06F 3/0412** (2013.01); **B32B 3/02** (2013.01); **B32B 3/263** (2013.01); **B32B 17/06** (2013.01);
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(58) **Field of Classification Search**
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20 Claims, 42 Drawing Sheets

