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(54) **Title:** OPTICAL EFFECT SYSTEM FOR ATTRACTION SYSTEM

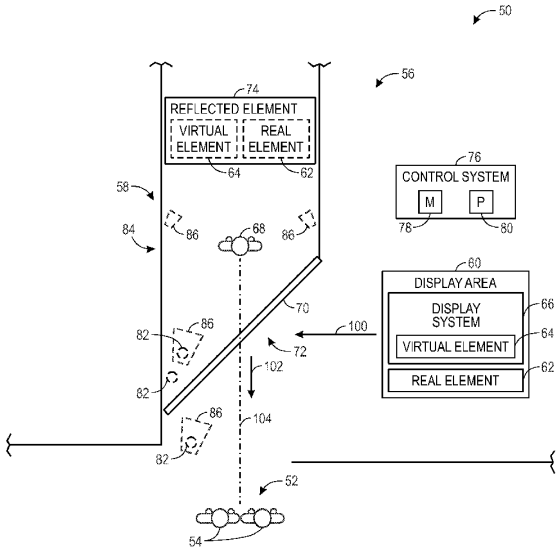

FIG. 2

(57) **Abstract:** An optical effect system (56) of an amusement park that utilizes a Pepper's Ghost-based effect to provide a more realistic portrayal of a virtual shadow by combining visual elements of a primary area (e.g., an optical effect area 58) and visual elements of a secondary area (e.g., a display area 60). In particular, the optical effect system (56) detects one or more characteristics of an interactive element (68), such as a person or object, within the primary area via a sensor (82). The one or more characteristics may include position, orientation, outline, movement, or the like of the interactive element (68). Further, the optical effect system (56) generates and/or adjusts image data comprising a virtual shadow based on the detected one or more characteristics. The optical effect system (56) additionally causes display of the image data within the secondary area, such that imagery of the virtual shadow is reflected by a beam splitter (70) and combined with imagery of the interactive element (68) within the primary area.

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