figured to capture silhouette images of an input object **112** that provides gesture inputs above the light-diffusive screen **110**, similar to as described above in the example of FIG. **1**. The silhouette images can thus be provided to a controller (not shown), such that the gesture inputs can be translated into device inputs.

[0035] In the example of FIG. **3**, the gesture table **106** also includes a projector **114** configured to project visual content, with which the user can interact via the input object **112**, onto the underside of the light-diffusive screen **20**. However, in the example of FIG. **3**, the projector **114** is configured off-axis from the light-diffusive screen **110** in that it projects the visual content onto a beam-splitter **116**. Specifically, the beam-splitter **116** is configured to reflect the visual content onto the underside of the light-diffusive screen **110** and to pass the IR illumination that is provided from the IR light source **108**. As a result, the visual content and the IR illumination are combined substantially on-axis by the beam-splitter **116**. Accordingly, the IR light source **108** can be substantially centered on the underside of the light-diffusive screen **110**, such that the IR illumination is diffusely emitted from the top-surface of the light-diffusive screen **110** in a more evenly distributed manner from a single IR light source.

[0036] It is to be understood that the gesture recognition interface system **100** is not intended to be limited to the example of FIG. **3**. As an example, the gesture recognition interface system **100** is not limited to using a beam-splitter **116** to provide the on-axis combination of IR light and the visual content. Therefore, the gesture recognition interface system **100** can be configured in any of a variety of ways.

[0037] FIG. **4** illustrates another example of a gesture recognition interface system **150** in accordance with an aspect of the invention. The gesture recognition interface system **150** includes a light-diffusive screen **152** that is configured substantially vertical. IR light sources **154** provide IR illumination to a rear-side of the light-diffusive screen **152**, and a projector **156** is configured to project visual content onto the rear-side of the light-diffusive screen **152**. One or more of the light-diffusive screen **152**, the IR light source **154**, and the projector **156** can be configured together as a single unit or can be configured separately, such that they can be individually mounted from a ceiling or a floor stand.

[0038] A pair of cameras **158**, such as including an IR filter, are configured to capture silhouette images of an input object **160** that provides gesture inputs in a foreground of the light-diffusive screen **152**, similar to as described above in the example of FIG. **1**. The cameras **158** can be mounted on a ceiling or floor stand at any of a variety of angles that are suitable to view the vertical light-diffusive screen **152**. The silhouette images can thus be provided to a controller (not shown), such that the gesture inputs can be translated into device inputs.

[0039] Because the light-diffusive screen **152** is configured substantially vertical, the gesture recognition interface system **150** may be more suitable for interaction with a larger audience. Specifically, the vertical light-diffusive screen **152** may be more readily viewable by a larger audience than the horizontal light-diffusive screen **20** described above in the example of FIG. **1**. As such, the gesture recognition interface system **150** can be implemented for a variety of purposes, such as presentations to a large audience and/or as a virtual dry-erase board in which users provide touch gestures to write and/or draw on the vertical light-diffusive screen **152**, as described in patent application Attorney Docket Number NG(MS)-018026USPRI.

[0040] It is to be understood that the gesture recognition interface system **150** is not intended to be limited to the example of FIG. **4**. As an example, the projector **156** can be configured to project the visual content to the front-side of the light-diffusive screen **152**, as opposed to the rear-side. In addition, similar to as described above in the example of FIG. **1**, the projector **156** could be configured without an IR filter, such that the projector **156** provides both the visual content and the IR illumination to the rear-side of the light-diffusive screen **152**. Furthermore, the gesture recognition interface system **150** can implement a beam-splitter to provide substantially on-axis combination of the visual content and the IR illumination onto the rear-side of the vertical light-diffusive screen **152**, similar to as described above in the example of FIG. **3**. Accordingly, the gesture recognition interface system **150** can be configured in any of a variety of ways.

[0041] FIG. **5** illustrates another example of a gesture recognition interface system **200** in accordance with an aspect of the invention. The gesture recognition interface system **200** includes a substantially translucent screen **202** that can be any of a variety of commercially available display screens. In the example of FIG. **5**, the substantially translucent screen **202** is configured at a tilted angle. However, it is to be understood that the substantially translucent screen **202** can be oriented in any of a variety of ways. A projector **204** is configured to project visual content onto the rear-side of the substantially translucent screen **202**. The substantially translucent screen **202** can be diffusive of visible light, such that the visual content is observable to from the opposite side of the substantially translucent screen **202** as the projector **204**. Accordingly, an input object **206** can provide gesture inputs that are interactive with the visual content in a foreground of the substantially translucent screen **202**.

[0042] An IR light source **208** provides IR illumination to a Lambertian surface **210**. Thus, the IR illumination is reflected from the Lambertian surface **210** in a scattered manner, thus being diffusely reflected to the rear-side of the substantially translucent screen **202**. As an example, the Lambertian surface **210** can be configured as a single surface that is oriented to reflect the IR illumination to the rear of the substantially translucent screen **202**. As another example, the projector **204** and the IR light source **208** can be arranged in an enclosure that is bound on one side by the substantially translucent screen **202**. Thus, one or more of the inner surfaces of the enclosure can be lined with the Lambertian surface **210**. Accordingly, the IR illumination can be scattered from one or more of the inner surfaces of the enclosure to be diffusely and substantially uniformly provided at the substantially translucent screen **202**. As a result, a pair of cameras **212** can capture silhouette images of the input object **206** based on the brightness contrast between the input object **206** and the IR illumination that is diffusely provided through the substantially translucent screen **202**. The silhouette images can thus be translated into device inputs by a controller (not shown), similar to as described above in the example of FIG. **1**.

[0043] It is to be understood that the gesture recognition interface system **200** is not intended to be limited to the example of FIG. **5**. As an example, the projector **204** can be configured to project the visual content to the front-side of the substantially translucent screen **202**, as opposed to the rear-side. As another example, the substantially translucent screen