characteristics as the mechanical layer **132** (FIGS. **8**A and **8**B) except as specifically stated otherwise.

[0111] In the embodiment shown in FIG. **13**A, the reflective element **107** comprises a mirror **675** which is generally parallel to and spaced from the mechanical layer **632** and the dielectric layer **628**. The reflective element **107** comprises a support connection **677** that mechanically couples the mirror **675** to the mechanical layer **632**. In the embodiment shown in FIG. **13**A, the mirror **675** and the support connection **677** comprise an electrically conductive material such as, for example, aluminum, nickel, indium-tin-oxide, or molybdenum. A portion **679** of the mechanical layer **632** comprises an electrically nonconductive material and is configured to provide electrical insulation between the mirror **675** and the mechanical layer **632**. In this embodiment, the mirror **675** is mechanically coupled to, but electrically insulated from, the mechanical layer **632**.

[0112] In this embodiment of the MEMS device, the mirror **675** of the reflective element **107** is electrically conductive and highly reflective and may be fabricated from a highly conductive and reflective metal such as, for example, aluminum. In this embodiment, a lower surface **648** of the mechanical layer **632** is not configured to be reflective. The optical layer **624** comprises the first electrode **101**. The support structure **105** comprises the mechanical layer **632** and the support posts **636***a* and **636***b*. The mechanical layer **632** comprises the second electrode **102**. As shown in FIG. **13**A, the third electrode **103** of the device **600** comprises electrically conductive portions of the support posts **636***a*, **636***b*.

[0113] In certain embodiments of the MEMS devices shown in FIGS. **13**A-**13**D, the mirror **675** is electrically conductive and is connected to an electric voltage or current source that is independent of the three electrodes **101**, **102**, and **103**. In these embodiments, different voltages are applied to the optical layer **624**, the mechanical layer **632**, and the mirror **675** to provide a tunable interferometric cavity **644** in which the movement of the mirror surface (e.g., the reflective element **107**) has a tunable relationship to these applied voltages. Further details regarding tunable MEMS architectures are provided in U.S. patent application Ser. No. 11/144,546 titled "ANALOG INTERFEROMETRIC MODULATOR DEVICE," filed Jun. 3, 2005, which is hereby incorporated by reference herein in its entirety.

[0114] By applying voltages to the electrodes **101**, **102**, and **103**, the MEMS device **600***a* can at least partially reduce or counteract the adhesive force between the reflective element **107** and the portion **113** of the device when in the first position. The voltages may be applied to the device **600***a* in substantially the same manner as described herein for the MEMS devices **100**, **200**, **300**, and **400** so as to achieve at least a partial reduction in the adhesive force and to facilitate the release of the reflective element **107** from the portion **113**.

[0115] FIG. **13**B is a side cross-sectional view of another embodiment of a MEMS device **600***b* that is generally similar to the device **600***a* shown in FIG. **13**A except as described below. In this embodiment, the reflective element **107** comprises one or more extensions **692** extending toward the second electrode **102**. The extensions **692** may be disposed on an upper surface of the mirror **675**. In some embodiments, the shape of the mirror **675** is generally similar to the shapes illustrated in FIGS. **12**C and **12**D. The extensions **692** protrude toward the second electrode **102** (e.g., the mechanical layer **632**). Because the extensions **692** are closer to the second electrode **102**, the electrostatic force exerted by the second electrode **102** on the extensions **692** is larger than on other portions of the mirror **675** and may facilitate the release of the reflective element **107** when in the first position.

[0116] FIG. **13**C is a side cross-sectional view of another embodiment of a MEMS device **600***c* that is generally similar to the devices **600***a* and **600***b* shown in FIGS. **13**A and **13**B except as described below. In this embodiment, the second electrode **102** may be configured to have one or more extensions **693** extending toward the reflective element **107**. In certain embodiments, the extensions **693** are disposed on the surface **648** of the mechanical layer **632**. Because the extensions **693** of the second electrode **102** are closer to the reflective element **107**, the electrostatic force exerted by the second electrode **102** on the reflective element **107** is larger and may facilitate the release of the reflective element **107** when in the first position. In some embodiments, both the second electrode **102** and the reflective element **107** are configured to comprise the extensions **693** and **692**, respectively.

[0117] In some embodiments of the devices **600***b* and **600***c* shown in FIGS. **13**B and **13**C, the extensions **692** and/or **693** are coated with a dielectric material so as to electrically insulate them from contact with other portions of the devices **600***b*, **600***c* such as, for example, the surface **648** of the mechanical layer **632**.

[0118] FIG. **13**D is a side cross-sectional view of another embodiment of a MEMS device **600***d* that is generally similar to the devices **600***a*, **600***b*, and **600***c* shown in FIGS. **13**A-**13**C except as described below. In the device **600***d*, the third electrode **103** comprises extensions that are disposed on the surface **648** of the mechanical layer **632**. The third electrode **103** is electrically insulated from the second electrode **102** (e.g., the mechanical layer **632**), for example, by providing a thin layer of nonconductive material between the third electrode **103** and the second electrode **102**. In these embodiments, the third electrode **103** protrudes more closely to the reflective element **107**, which may increase the electrostatic force exerted by the third electrode **103** on the reflective element **107** and may facilitate the release of the reflective element **107** from the portion **113** when the reflective element **107** is in the first position.

[0119] FIG. **14** illustrates a side cross-sectional view of another embodiment of a MEMS device **700** shown in the driven or actuated state. The MEMS device **700** is fabricated on a substrate layer **720** and comprises an optical layer **724**, a dielectric layer **728**, and a mechanical layer **732**. The substrate layer **720**, the optical layer **724**, and the dielectric layer **728** have generally the same characteristics and features as the respective layers **120**, **124**, and **128** in the MEMS device **100** described with reference to FIGS. **8**A and **8**B. The mechanical layer **732** comprises one or more support posts **736***a* and **736***b* and has generally the same characteristics as the mechanical layer **132** except as specifically stated otherwise.

[0120] In the embodiment shown in FIG. **14**, the reflective element **107** comprises a reflective portion of the mechanical layer **732**, for example, by making a portion of a lower surface **748** of the mechanical layer **732** highly reflective. In this embodiment, the first electrode **101** comprises the optical layer **724**. The support structure **105** comprises the mechanical layer **732** and the support posts **736***a* and **736***b*.