

ABSTRACT

Embodiments include a real time etch rate sensor and methods of for using a real time etch rate sensor. In an embodiment, the real time etch rate sensor includes a resonant system and a conductive housing. The resonant system may include a resonating body, a first electrode
5 formed over a first surface of the resonating body, a second electrode formed over a second surface of the resonating body, and a sacrificial layer formed over the first electrode. In an embodiment, at least a portion of the first electrode is not covered by the sacrificial layer. In an embodiment, the conductive housing may secure the resonant system. Additionally, the conductive housing contacts the first electrode, and at least a portion of an interior edge of the
10 conductive housing may be spaced away from the sacrificial layer.

[FIG. 1]