CLAIMS

1. A water polishing system comprising:

a source of ultrapure water (UPW);

an ultrafiltration (UF) module having an inlet and a permeate outlet;

a recirculation conduit communicating the permeate outlet with the inlet and forming a recirculation loop;

a recirculation pump disposed along the recirculation conduit upstream from the inlet of the UF module and fluidly coupled to the source of UPW;

a supply conduit fluidly coupled to the recirculating conduit and a demand source, the supply conduit positioned downstream from the permeate outlet;

a pressure control valve disposed along the recirculation conduit downstream from the supply conduit and configured to maintain a pressure of the permeate at a predetermined value; and

a holding tank disposed along the recirculation conduit.