

Abstract**A Two Stage UV Based Photolytic/Photocatalytic Process For Water Treatment**

Disclosed herein is a water purification and/or disinfection device, having at least one treatment vessel; at least one UVA light source arranged to supply UVA light to an interior portion of the at least one treatment vessel; and at least one UVC light source arranged to supply UVC light to an interior portion of the at least one treatment vessel, wherein the at least one UVA light source and the at least one UVC light source are adapted such that a water for purification and/or disinfection is sequentially treated with a dose of UVA light followed by a dose of UVC light, optionally wherein the dose of UVC light may be accompanied by a further dose of UVA light. Methods associated with purifying and disinfecting water are also provided.

FIG. 8