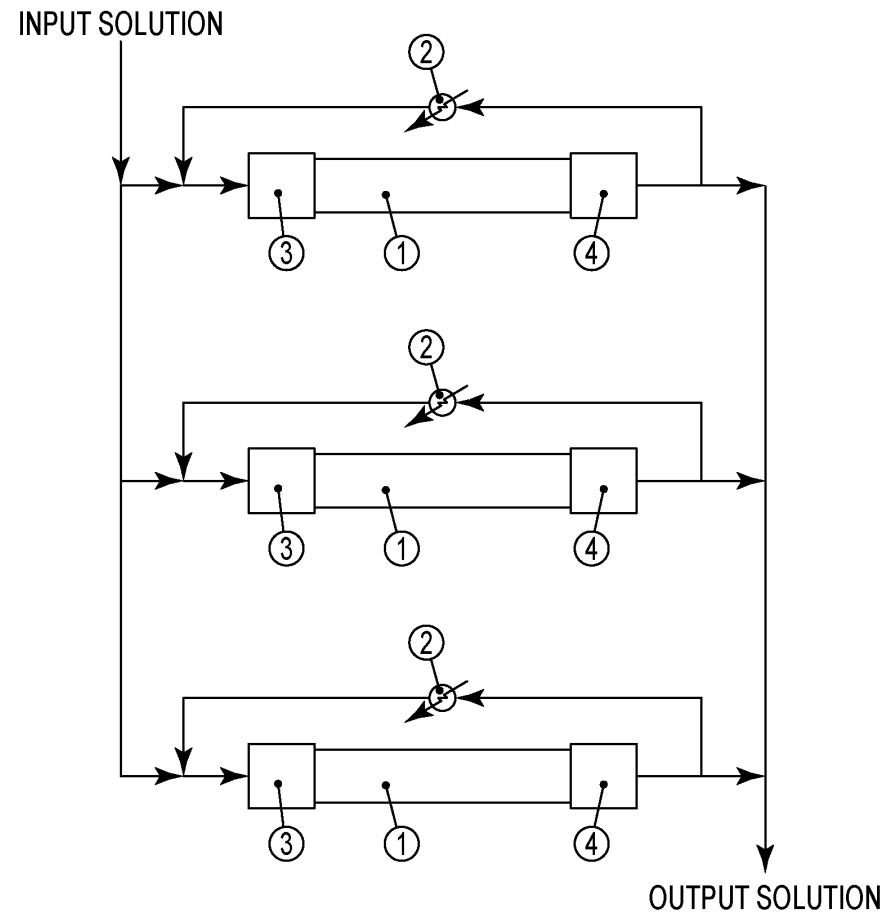




ITEM NO.	DESCRIPTION
1	PHOTOCHEMICAL REACTOR
2	RECYCLING/COOLING
3	SENSOR MODULE
4	PARTS FOR SAMPLING OR ADDING REAGENTS OR VENTING

Figure 1

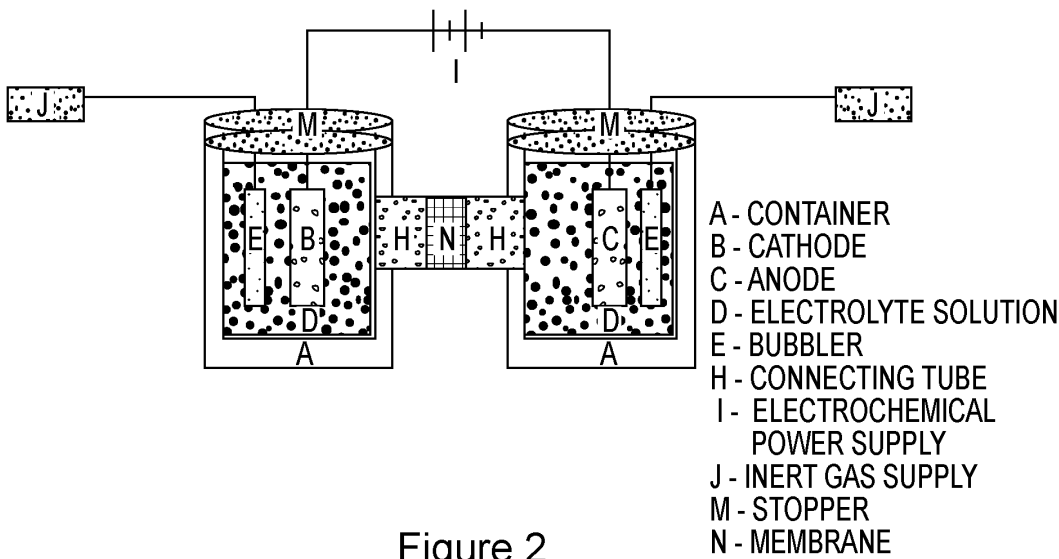


Figure 2

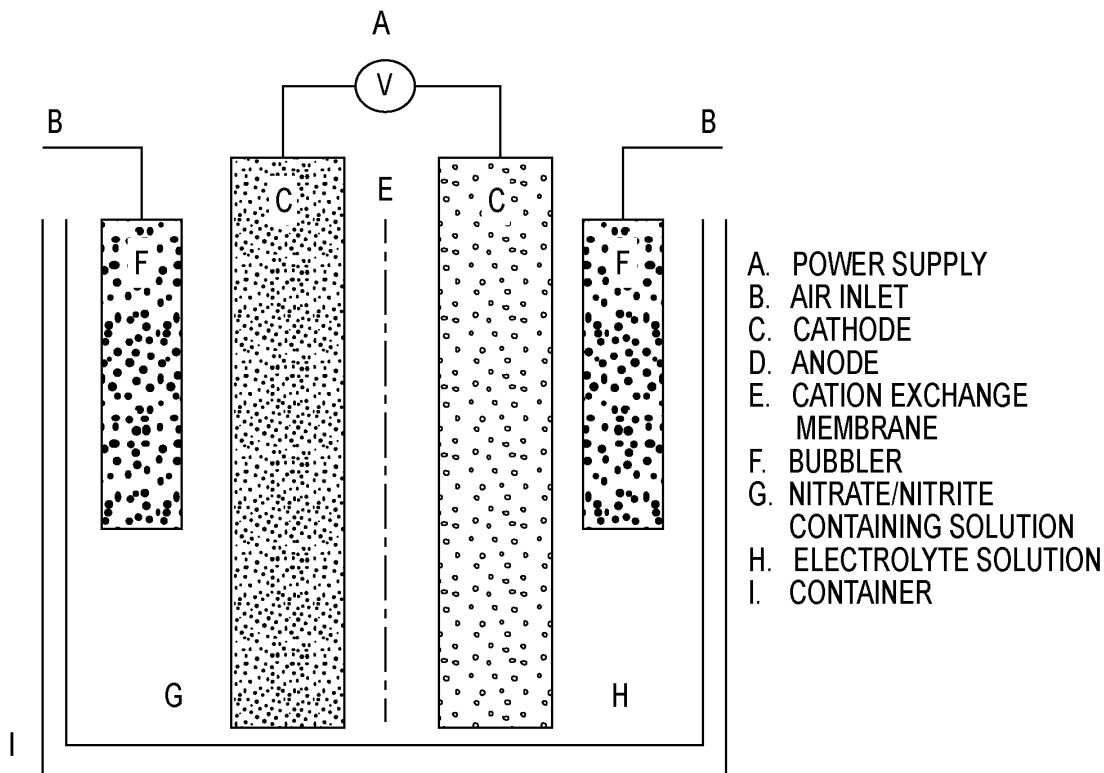


Figure 3

3/28

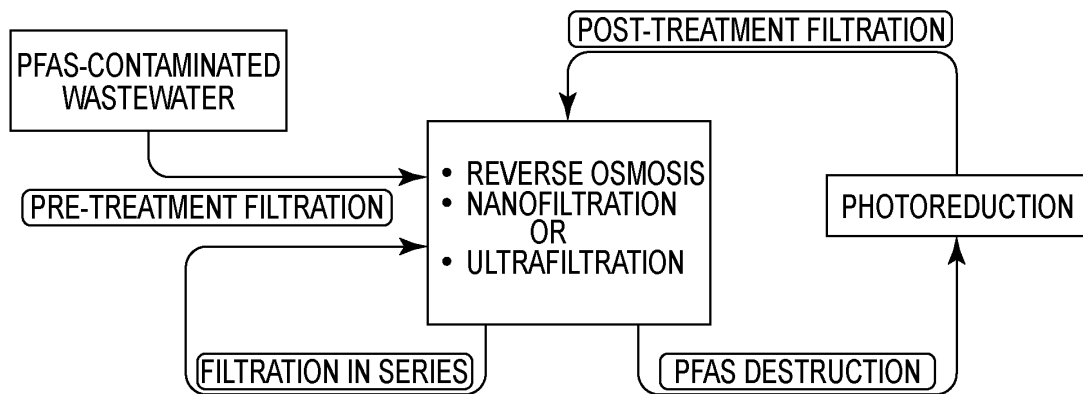


Figure 4

4/28

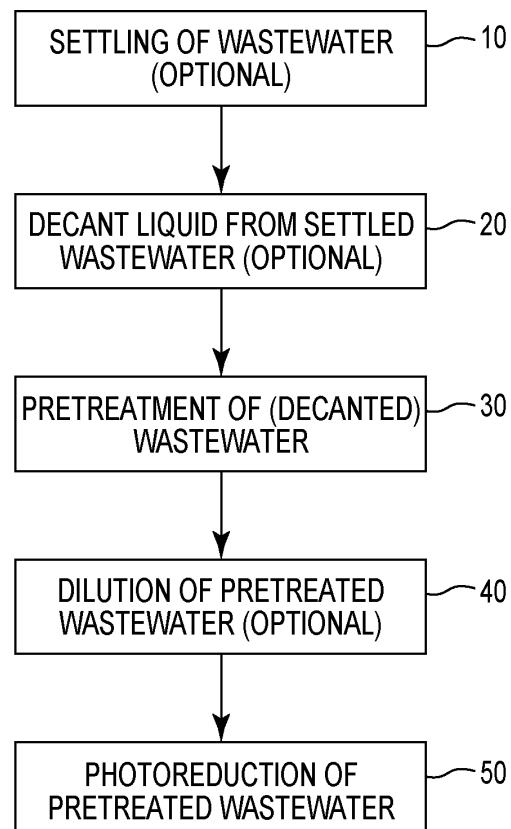


Figure 5

5/28

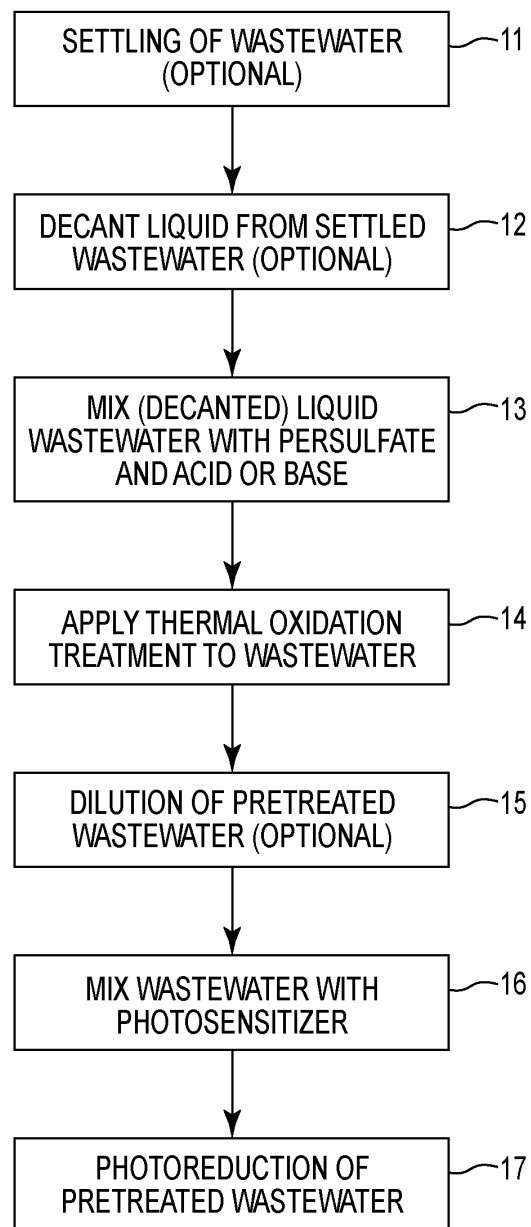


Figure 6

6/28

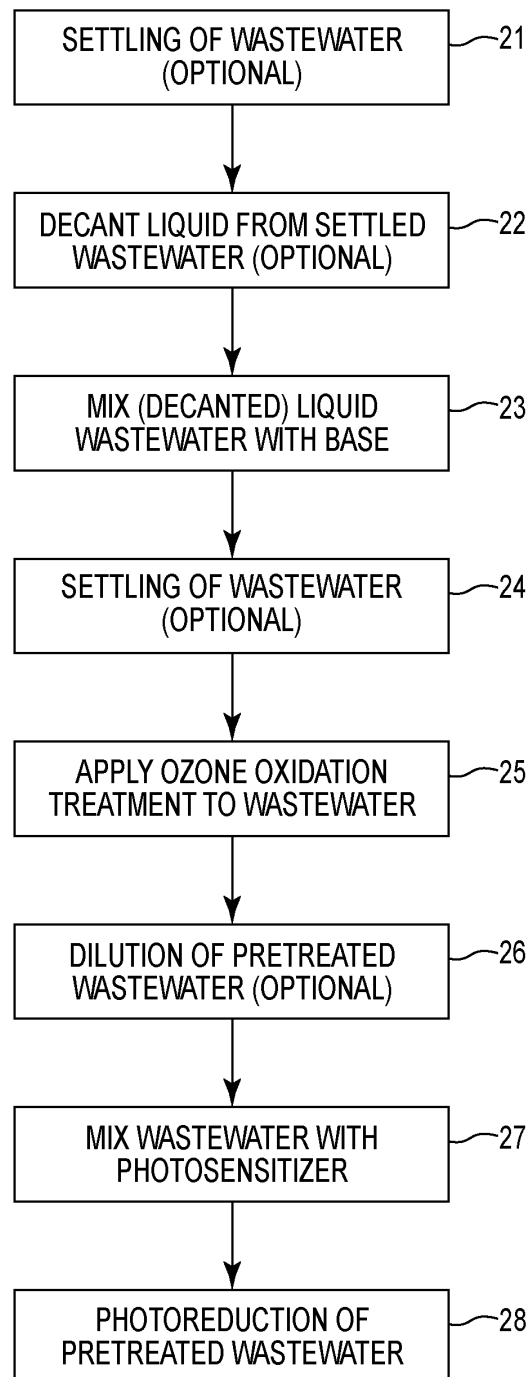


Figure 7

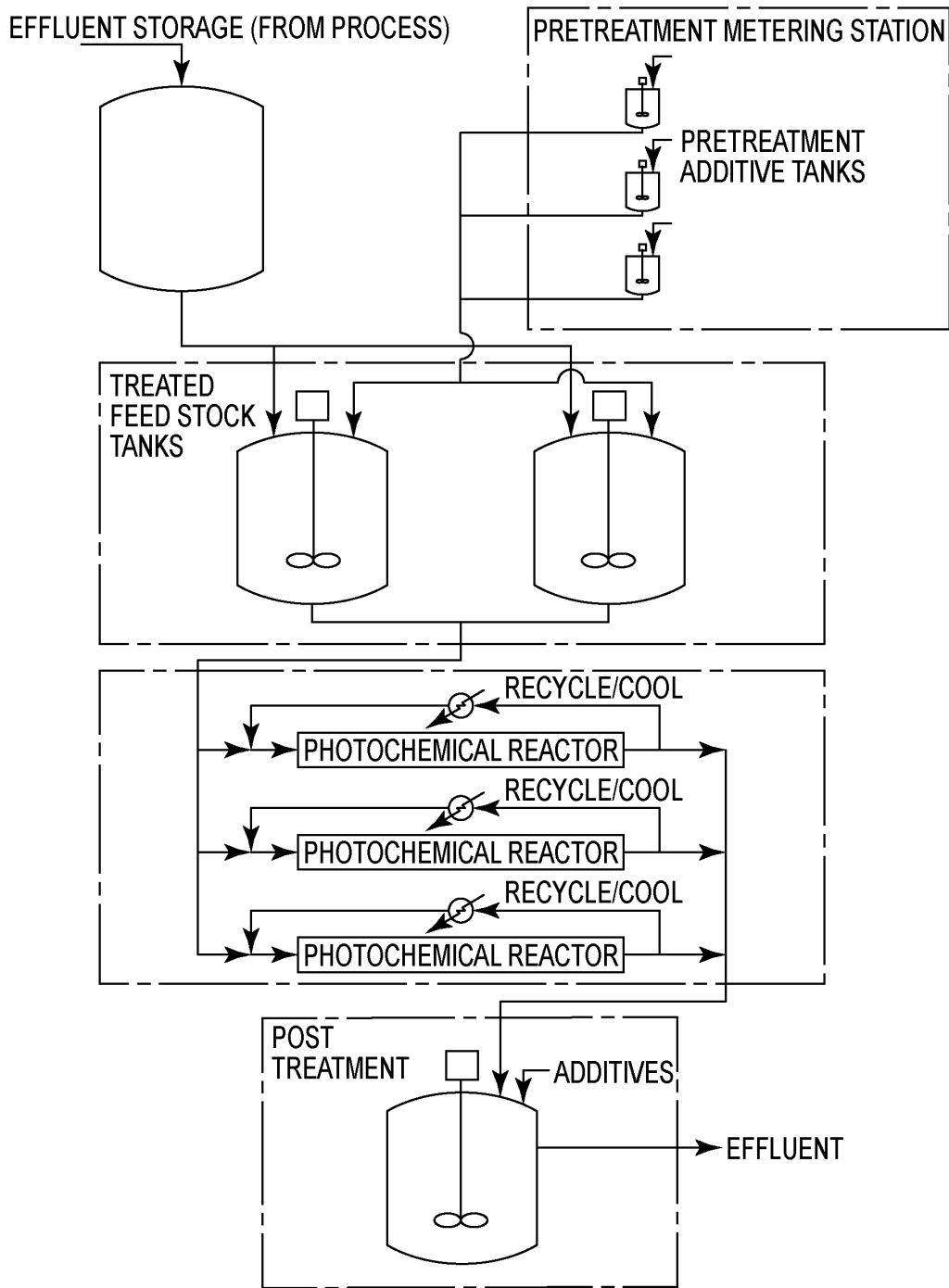


Figure 8

8/28

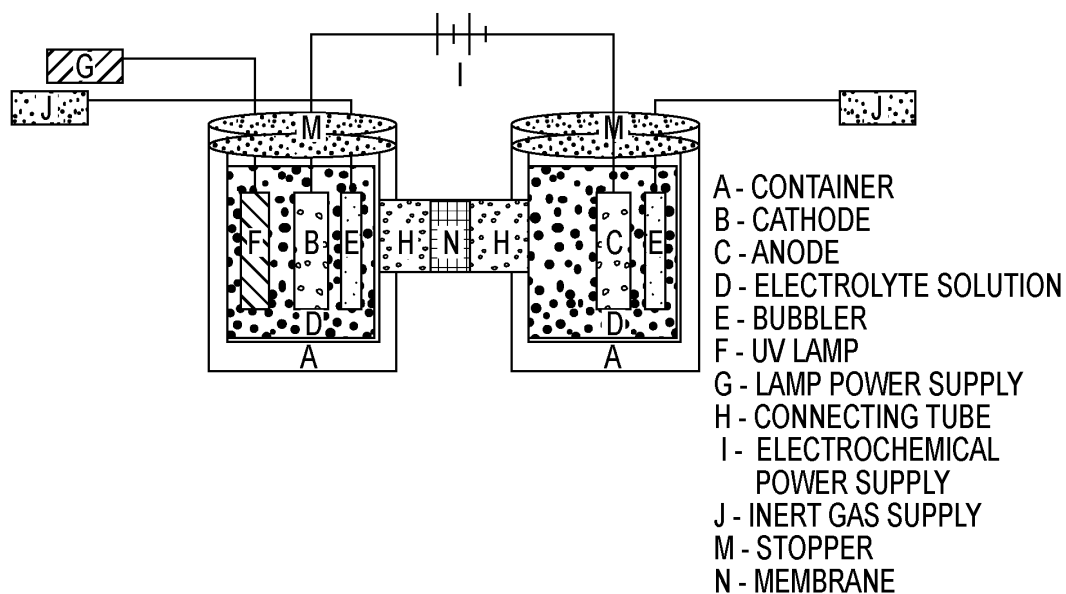


Figure 9

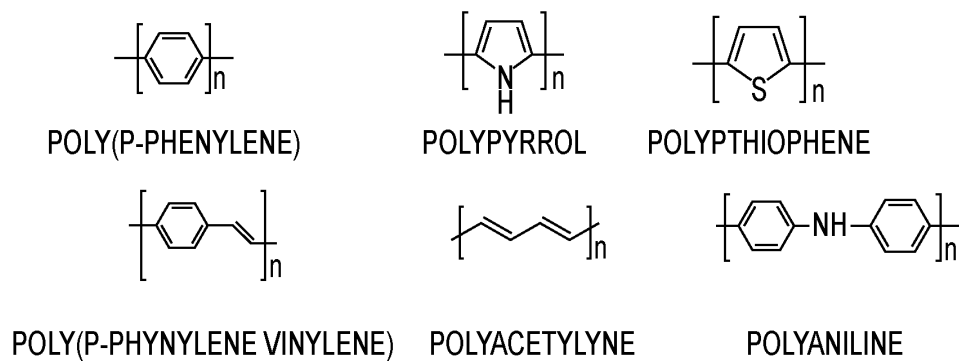
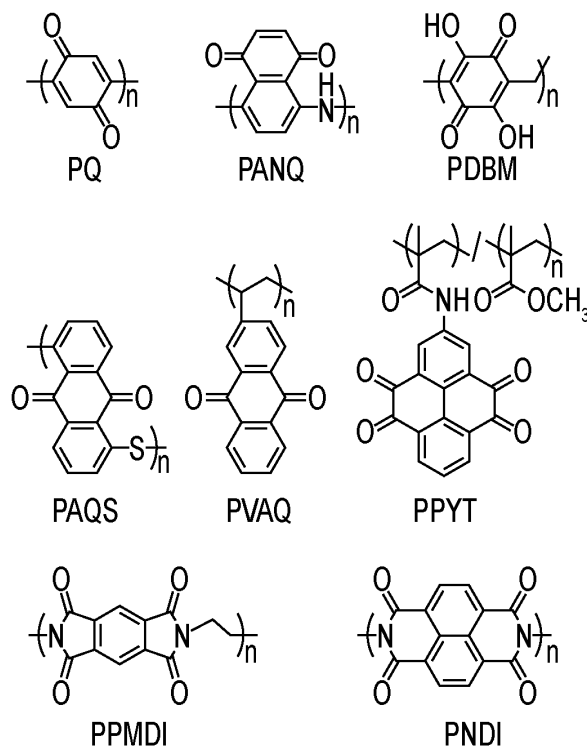


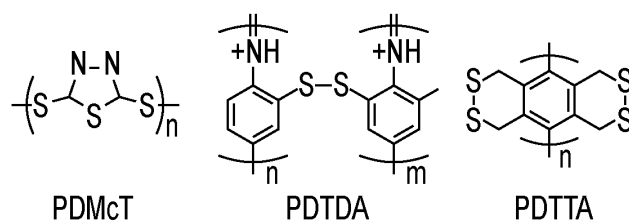
Figure 10

9/28



N-TYPE POLYMERIC MATERIALS BASED ON CONJUGATED CARBONYL GROUPS: POLYMERIC QUINONE (PQ), POLY(5-AMINO-1,4-NAPHTHOQUINONE) (PANQ), POLY(2,5-DIHYDROXY-1,4-BENZOQUINONE-3,6-METHYLENE (PDBM), POLY(ANTHRAQUINONYL SULFIDE) (PAQS), POLY(2-VINYLANTHRAQUINONE) (PVAQ), POLYMER-BOND PYRENE-4,5,9,10-TETRAONE (PPYT), POLYMERIC PYROMELLITIC DIIMIDE (PPMDI) AND POLYMERIC NAPHTHALENE DIIMIDE (PNDI).

Figure 11



TYPICAL ORGANODISULFIDES AND THEIR THEORETICAL CAPACITY: POLY(2,5-DIMERCAPTO-1,3,4-THIADIAZOLE) (PDMcT), POLY(2,20-DITHIODIANILINE) (PDTDA), POLY(5,8-DIHYDRO-1H,4H-2,3,6,7-TETRATHIA-ANTHRACENE) (PDTTA)

Figure 12

10/28

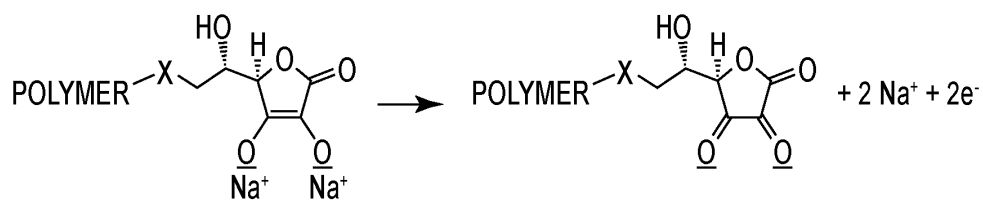


Figure 13

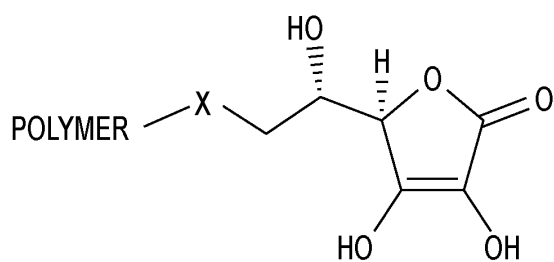


Figure 14

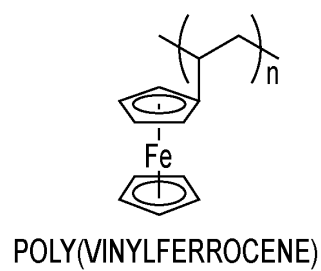


Figure 15

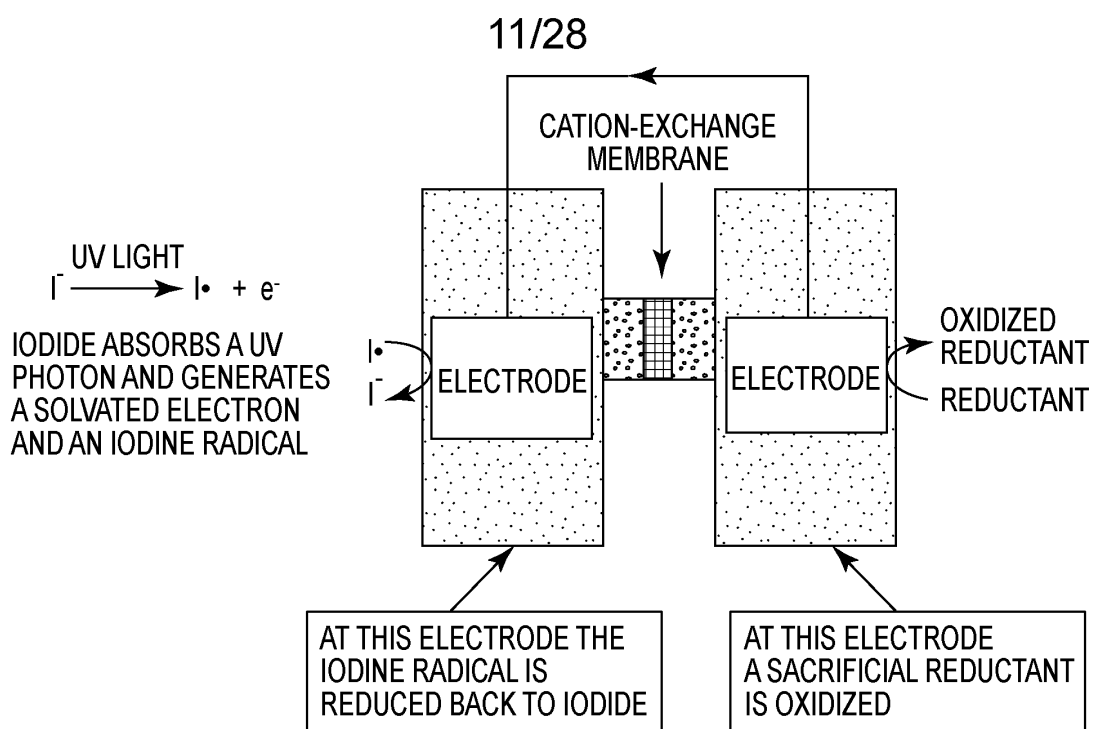


Figure 16

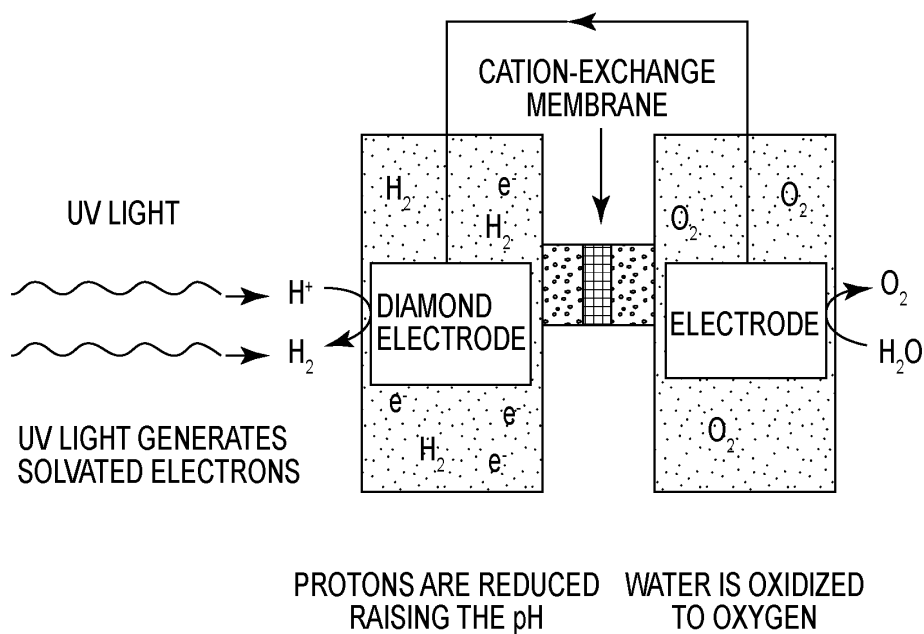


Figure 17

12/28

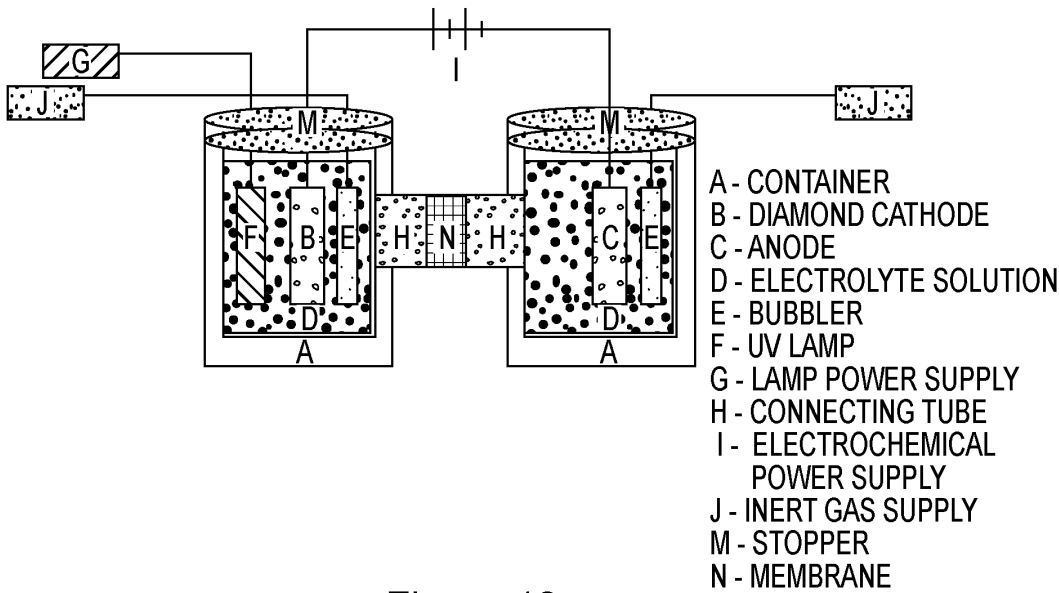


Figure 18

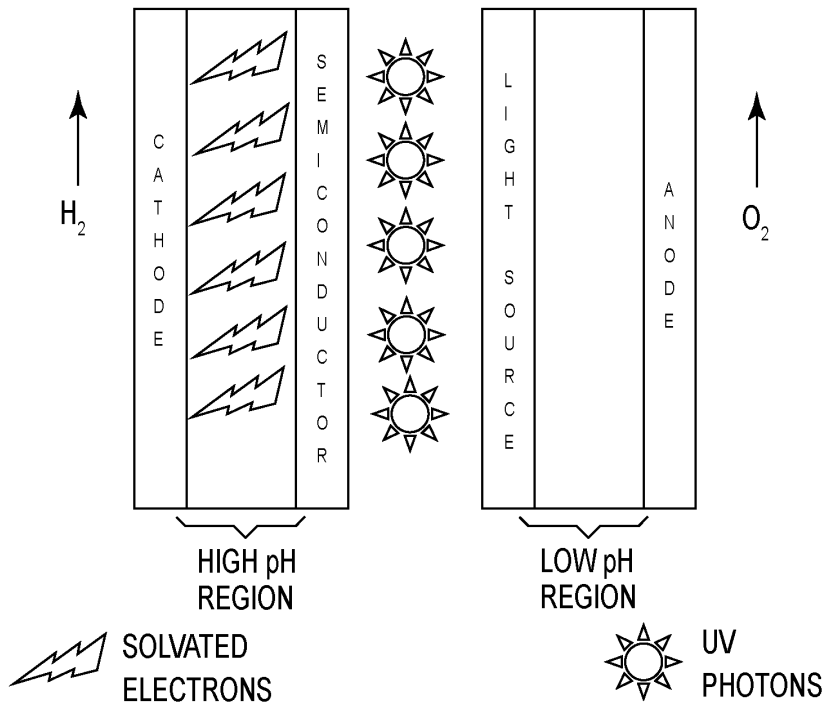


Figure 19

13/28

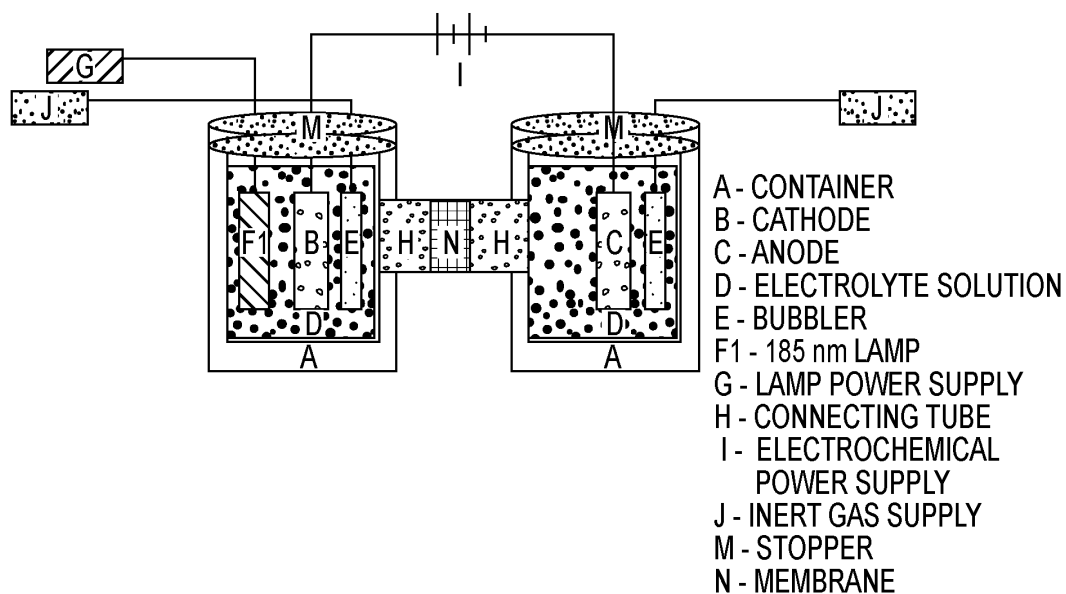
SCHEMATIC FOR PHOTO-ELECTROLYTIC 185
nm IRRADIATION WITH HYDROGEN EVOLUTION

Figure 20

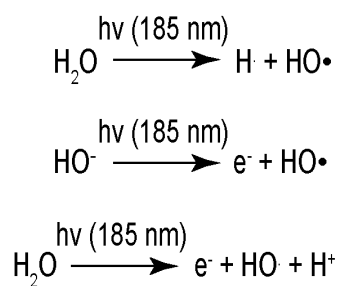


Figure 21

14/28

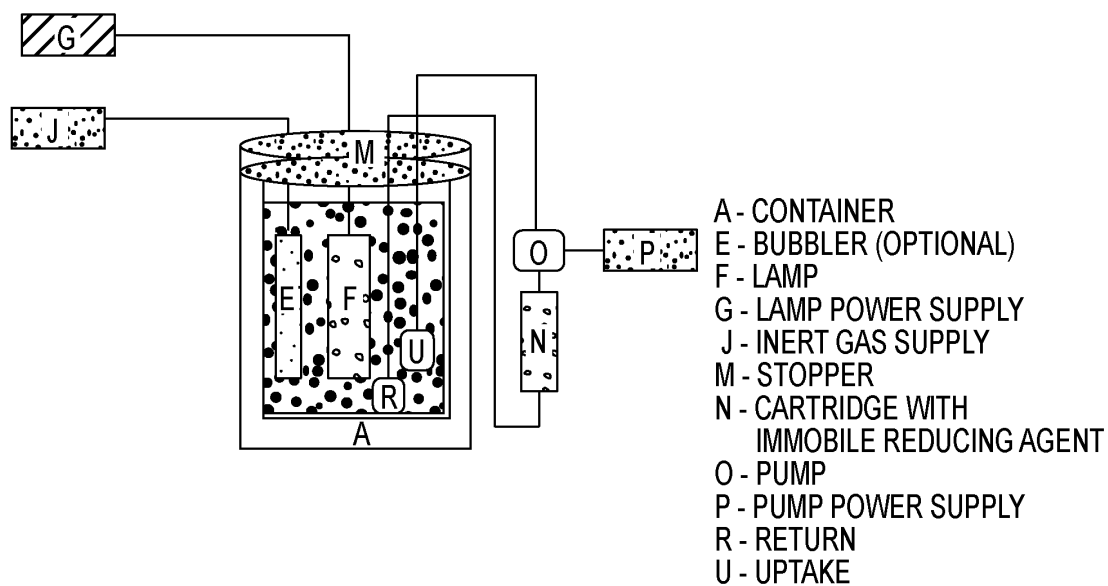


Figure 22

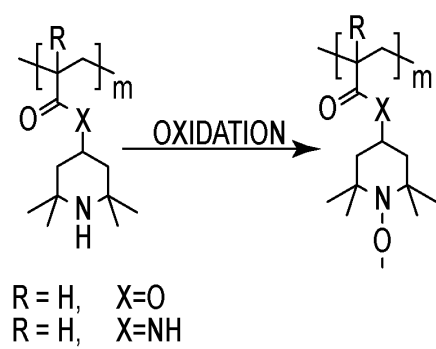


Figure 23

15/28

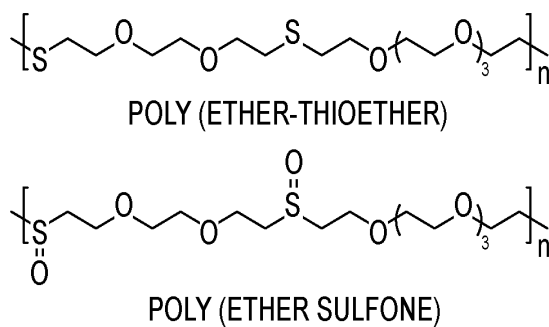


Figure 24

AROMATIC COMPOUND (ArC) + ELECTRON $\rightarrow$ AROMATIC ANION (ArC⁻)
 ArC⁻ + LIGHT $\rightarrow$ AROMATIC ANION EXCITED STATE (ArC^{-*})

AROMATIC COMPOUND (ArC) - ELECTRON $\rightarrow$ AROMATIC CATION (ArC⁺)
 ArC⁺ + LIGHT $\rightarrow$ AROMATIC CATION EXCITED STATE (ArC^{++*})

Figure 25

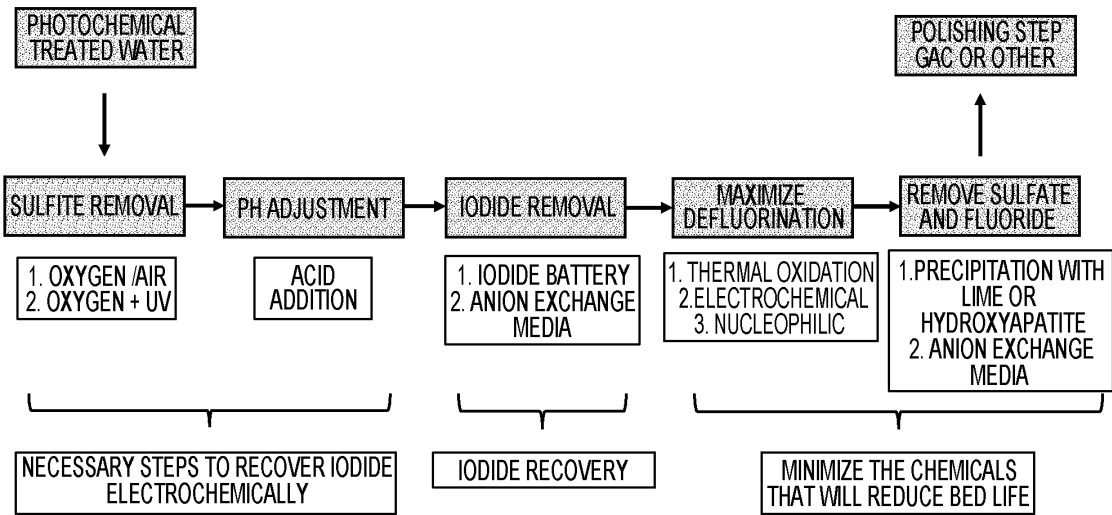


Figure 26

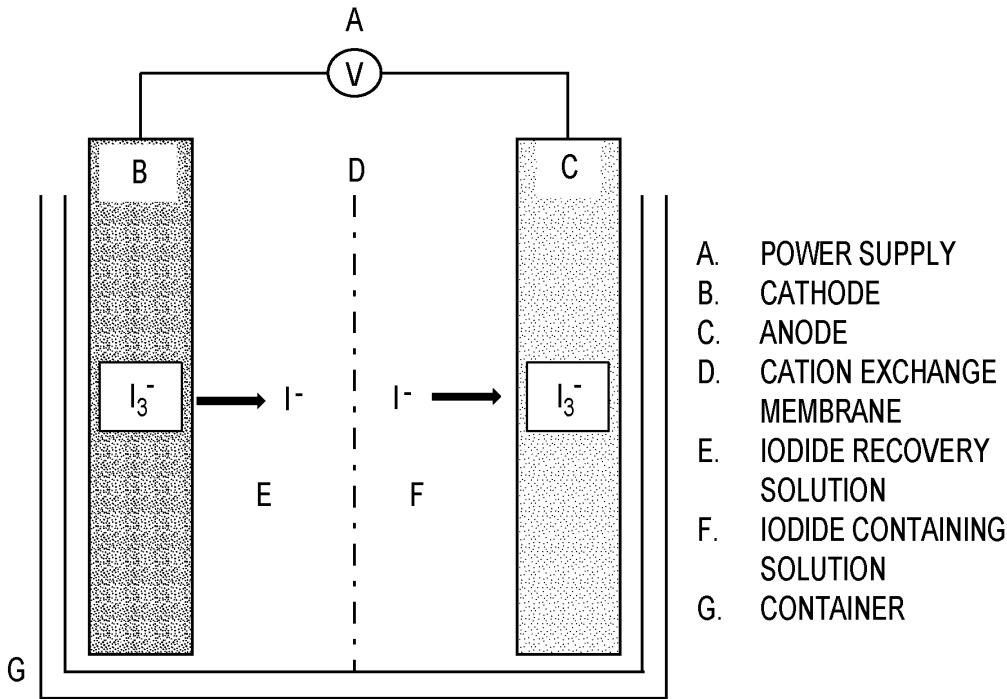


Figure 27

17/28

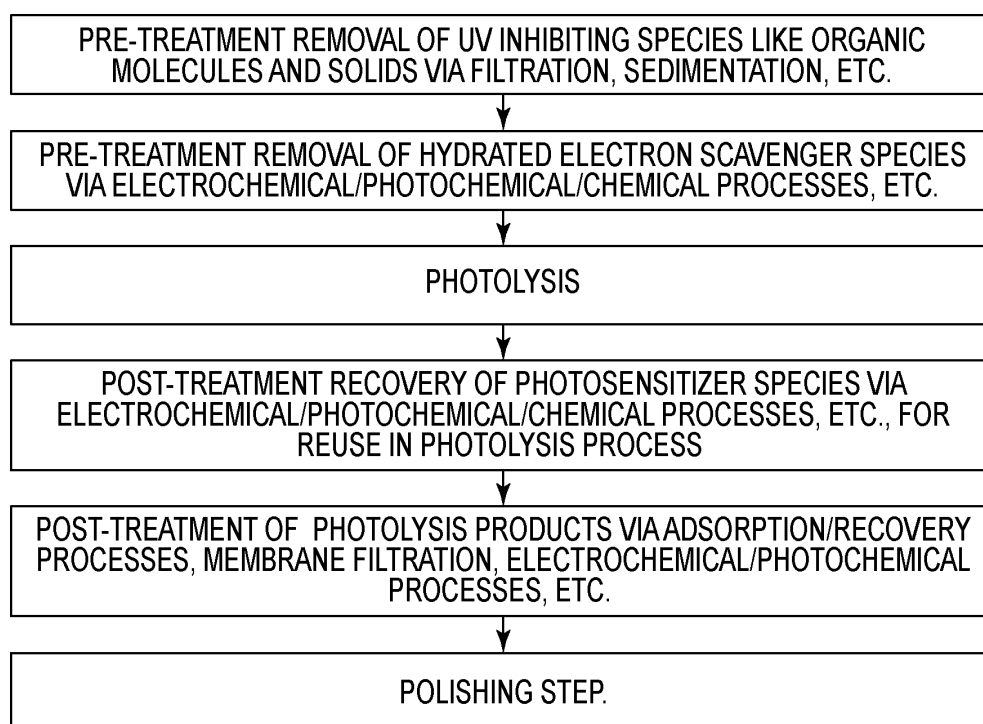


Figure 28

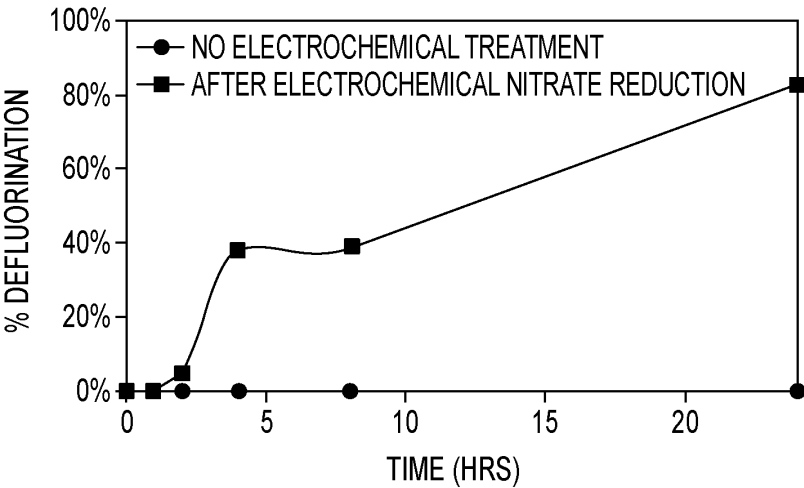


Figure 29

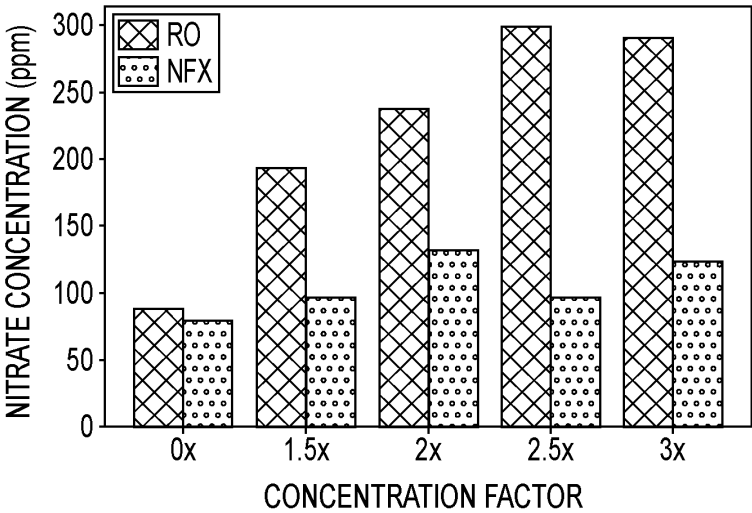


Figure 30

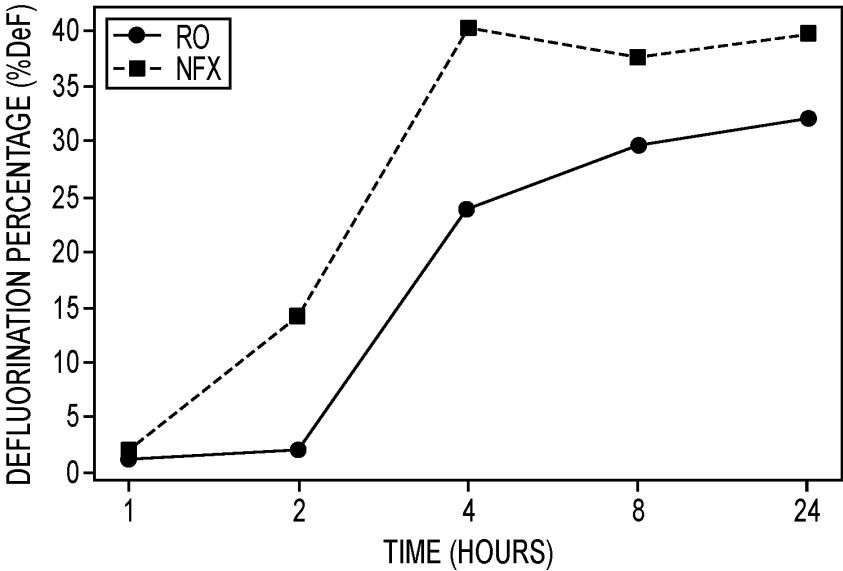


Figure 31

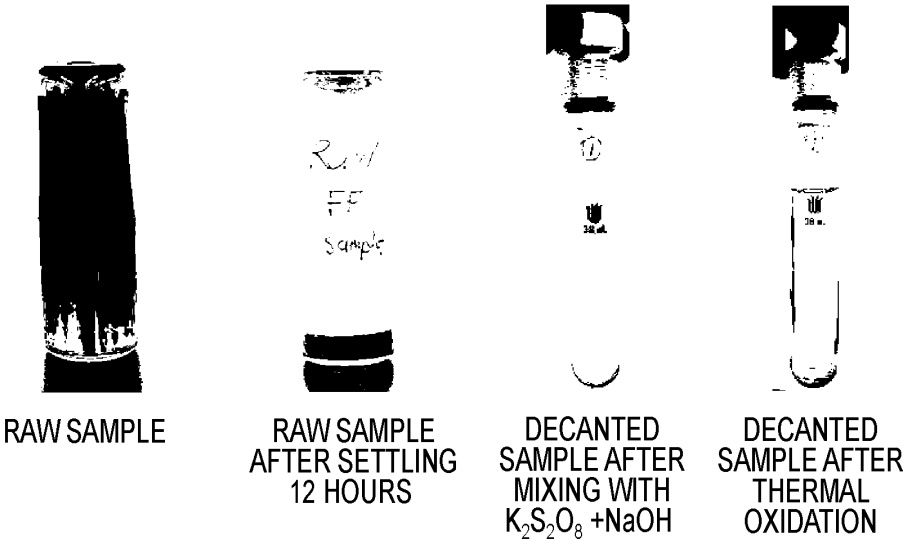


Figure 32

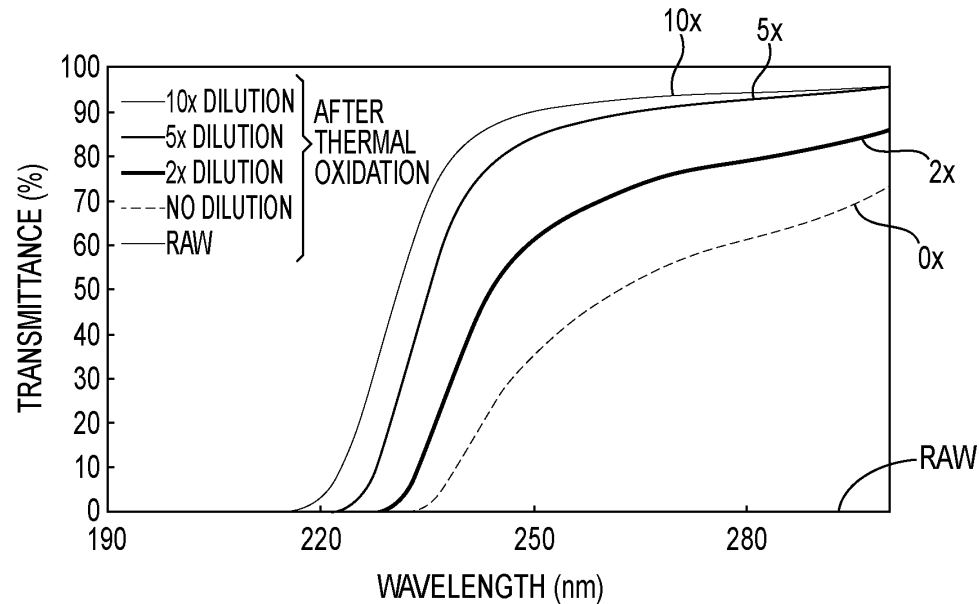


Figure 33

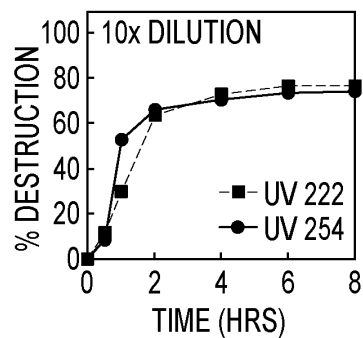


Figure 34a

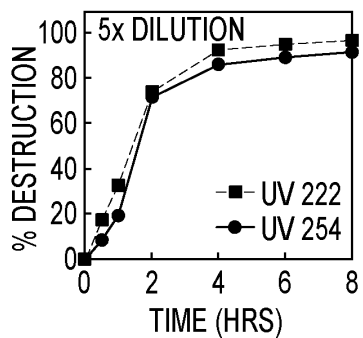


Figure 34b

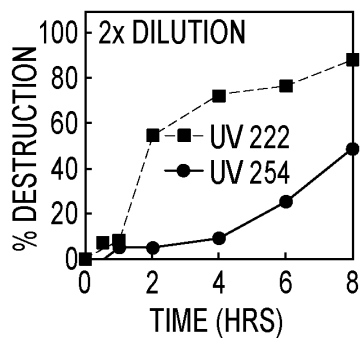


Figure 34c

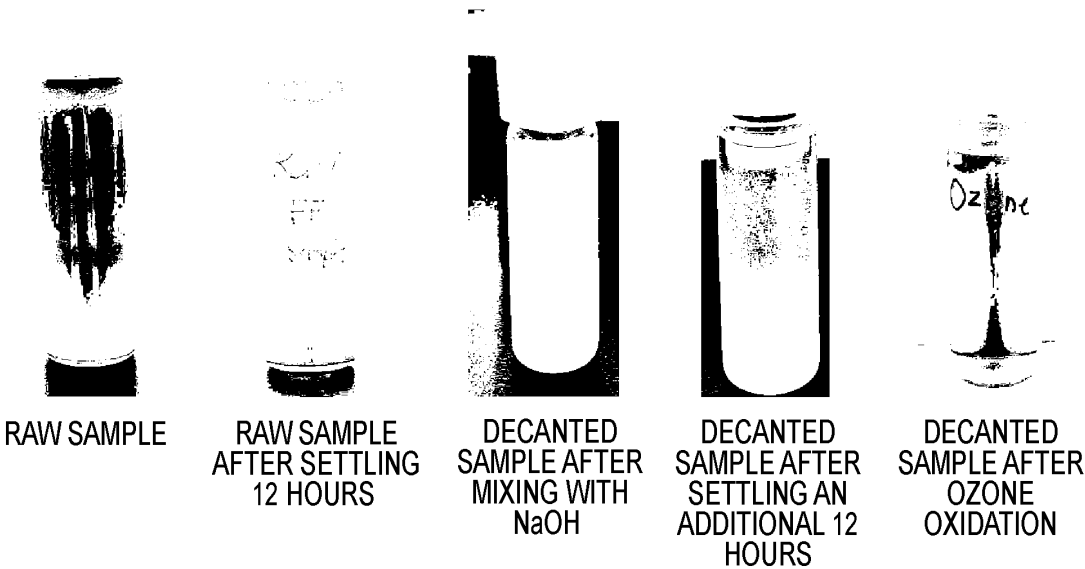


Figure 35

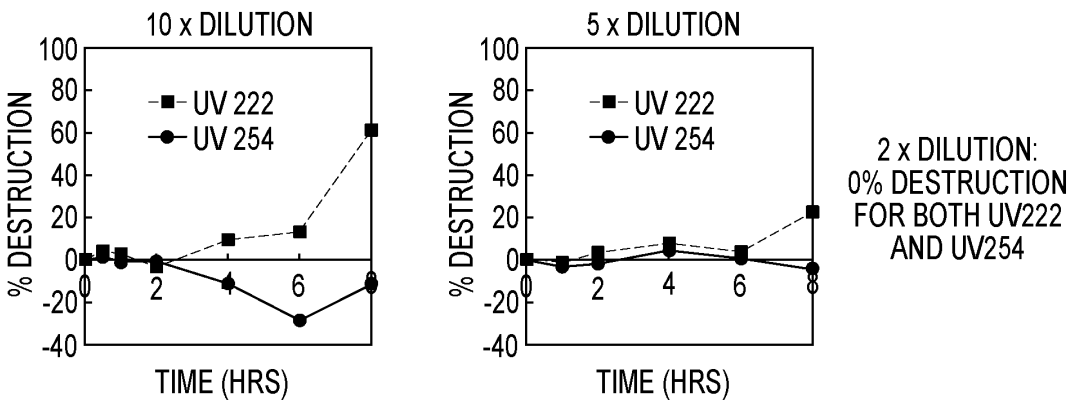


Figure 36

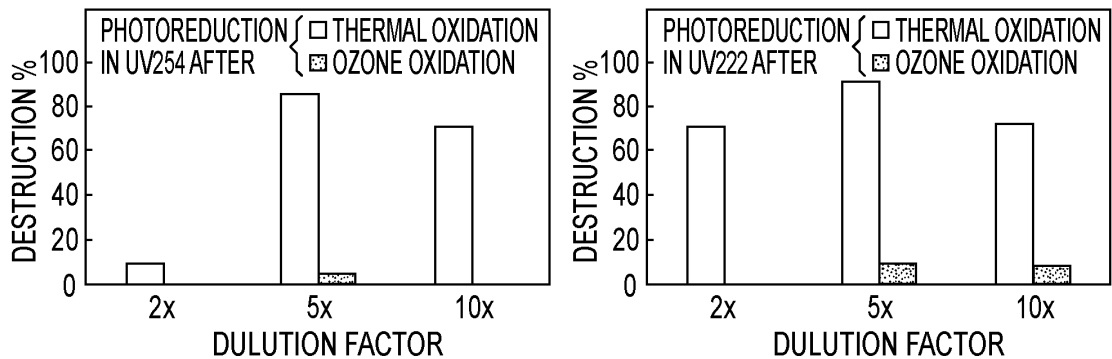


Figure 37

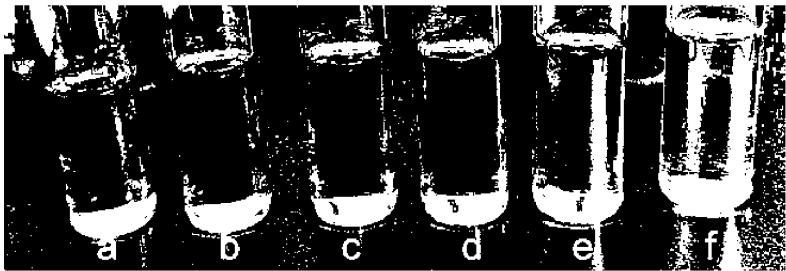


Figure 38

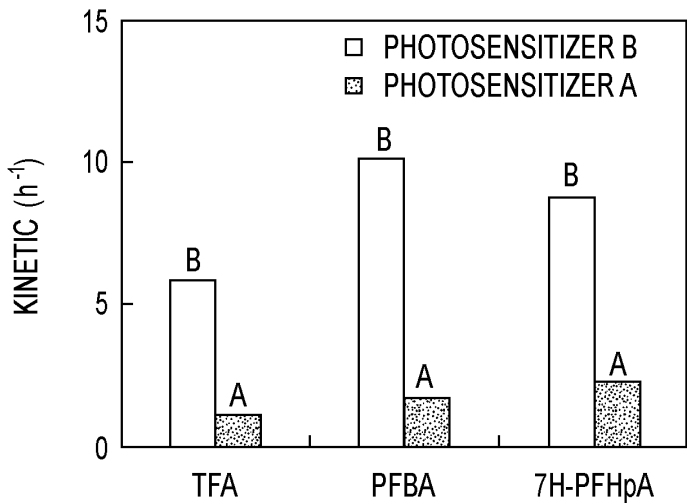


Figure 39

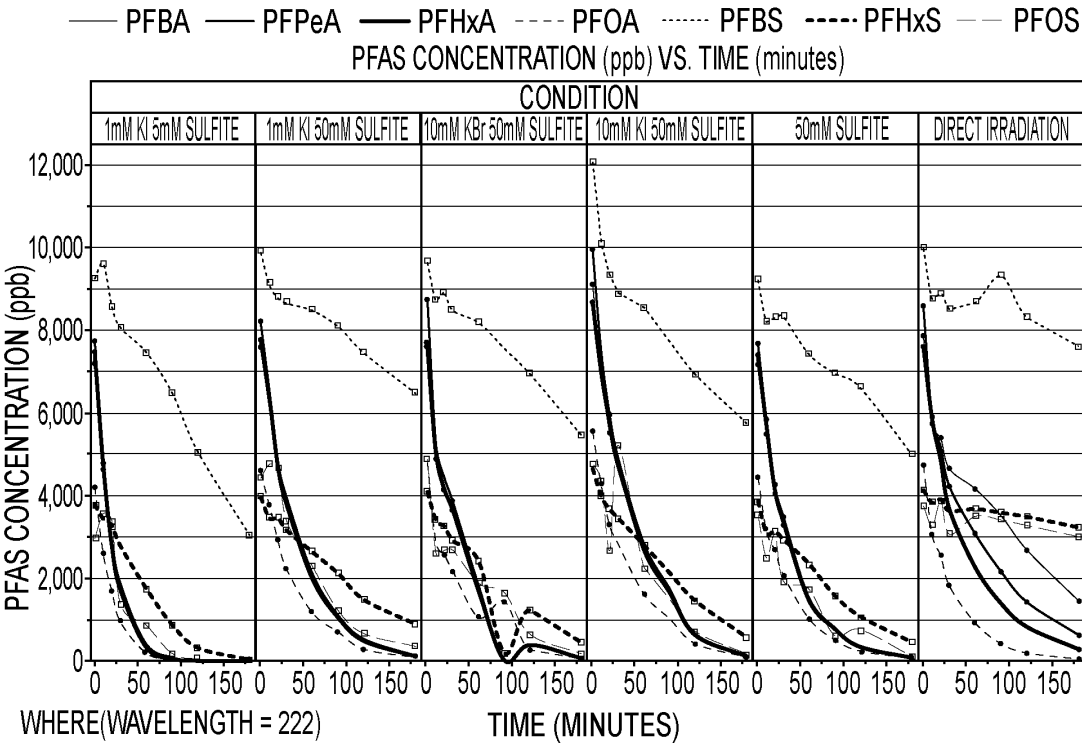


Figure 40

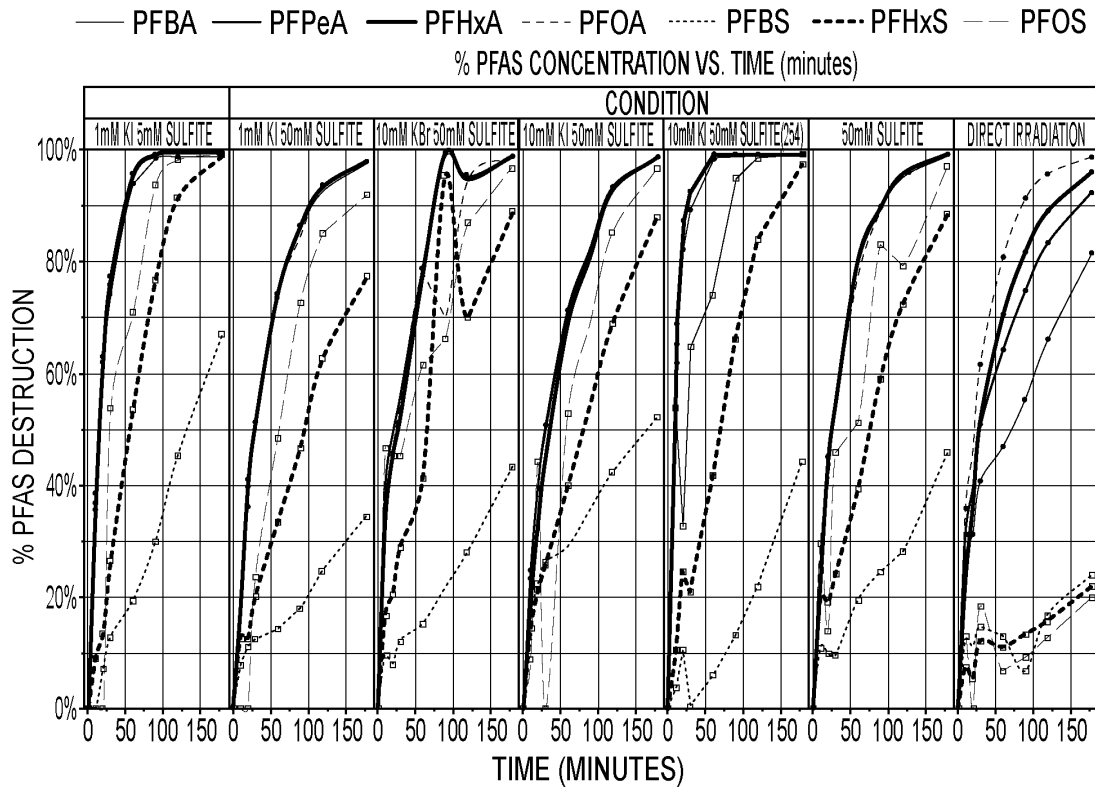


Figure 41

24/28

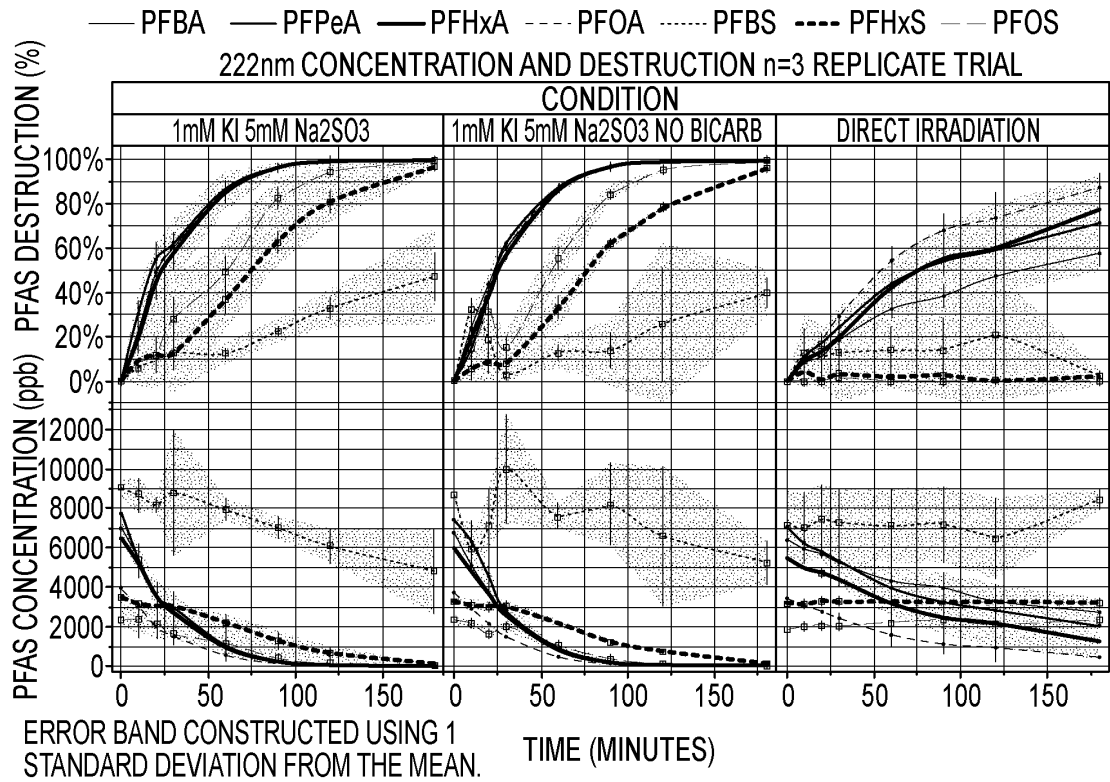


Figure 42

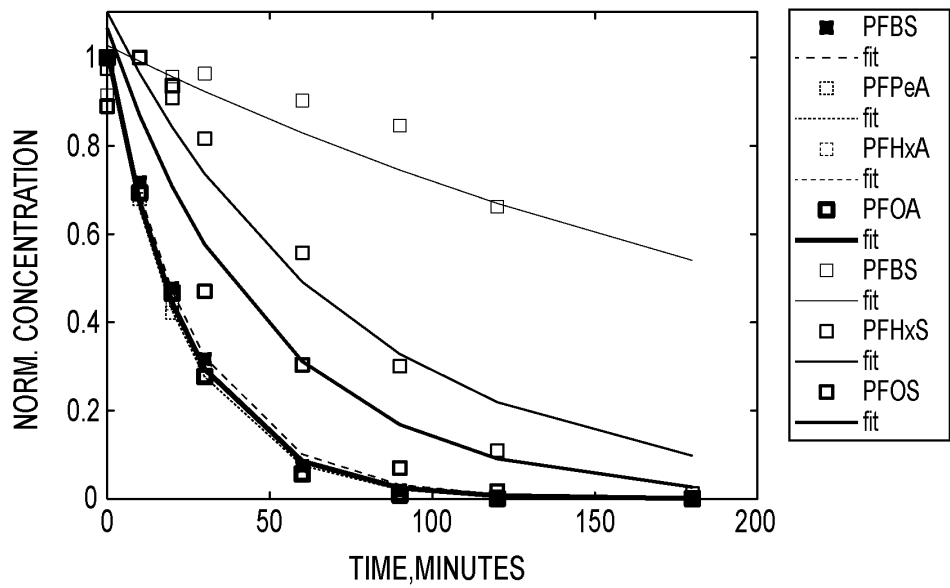


Figure 43

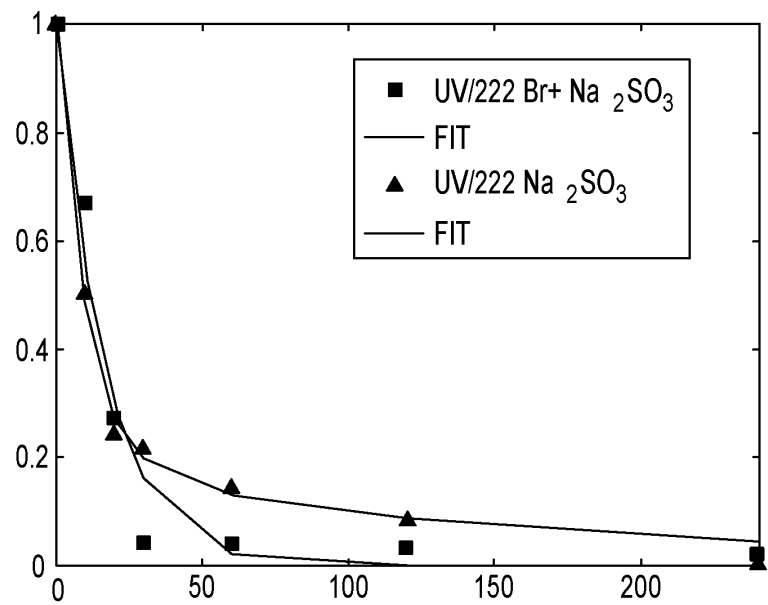


Figure 44

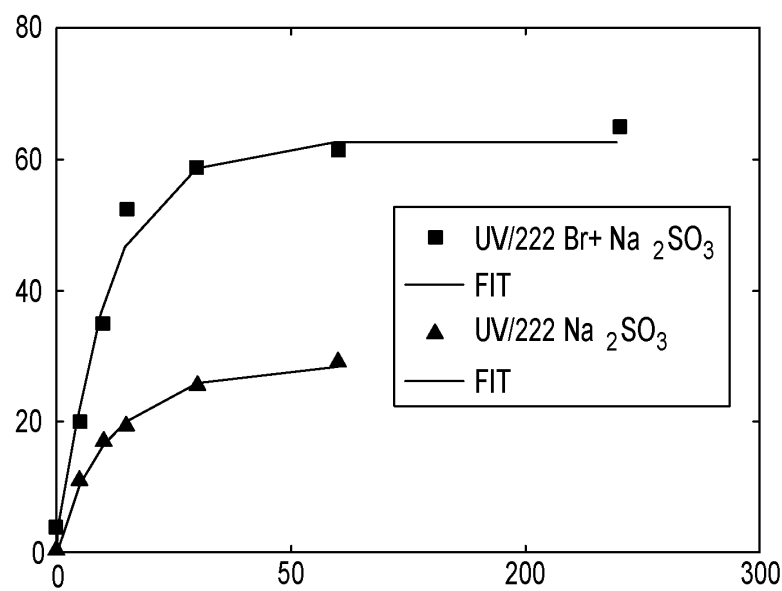


Figure 45

26/28

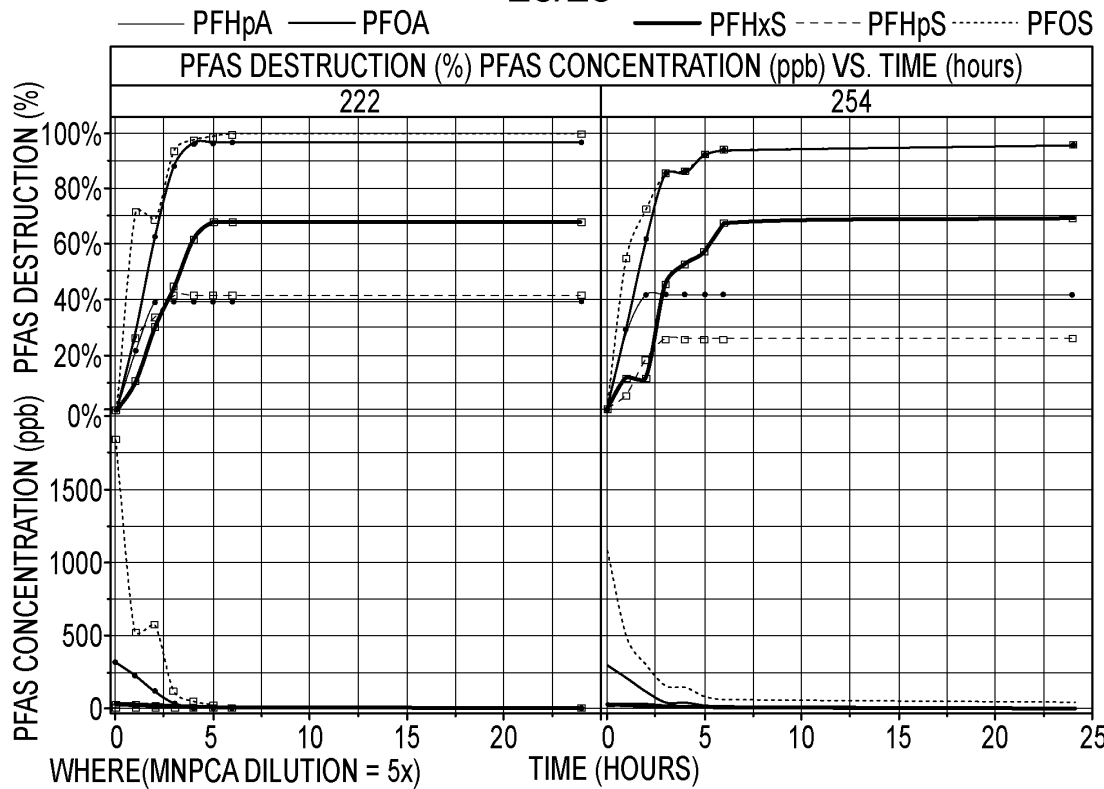


Figure 46

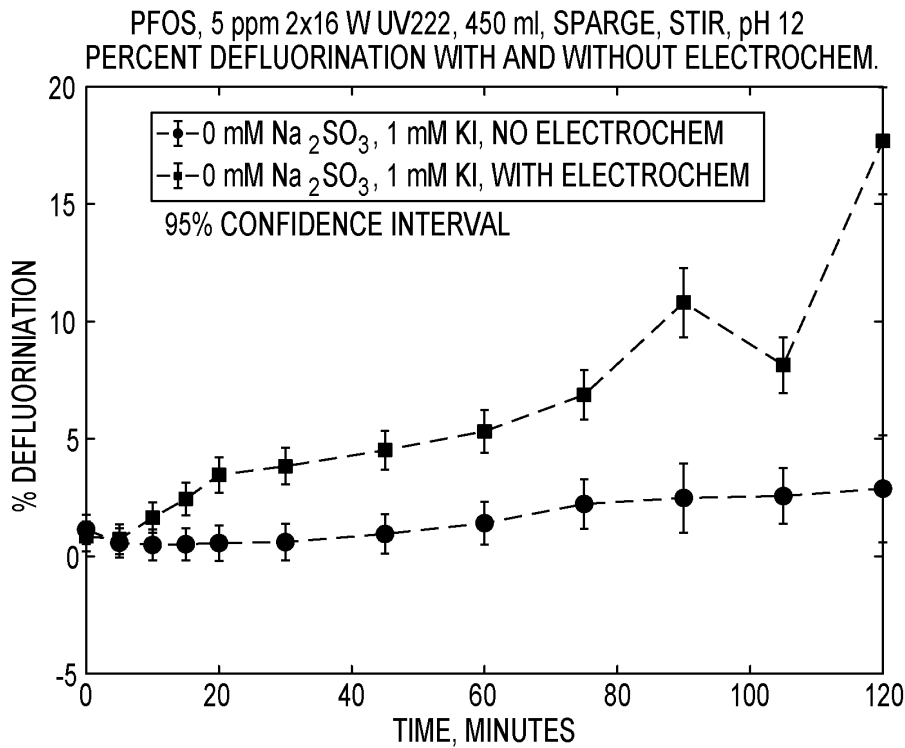


Figure 47

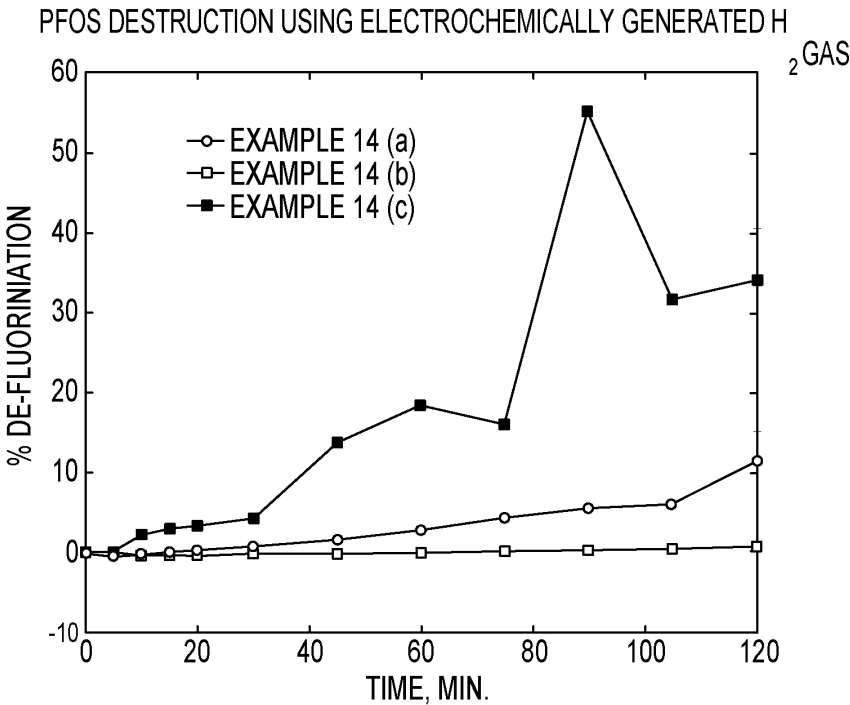


Figure 48

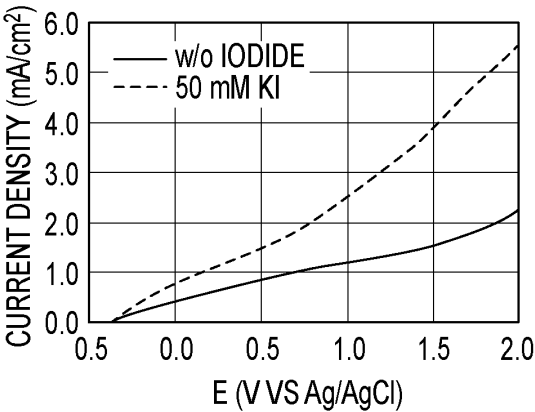


Figure 49a

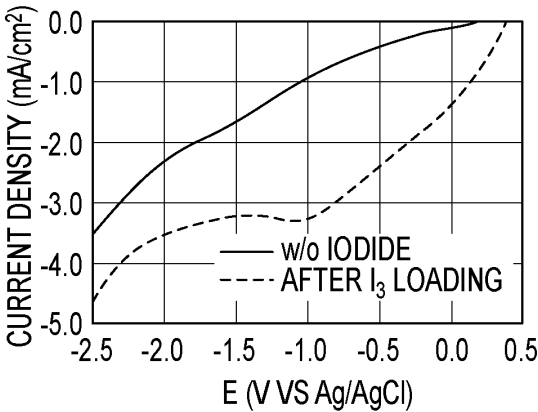


Figure 49b

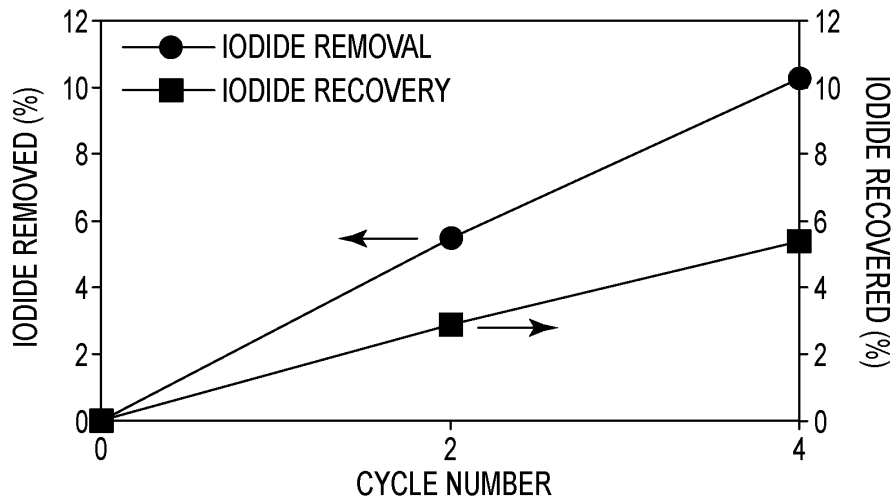


Figure 50