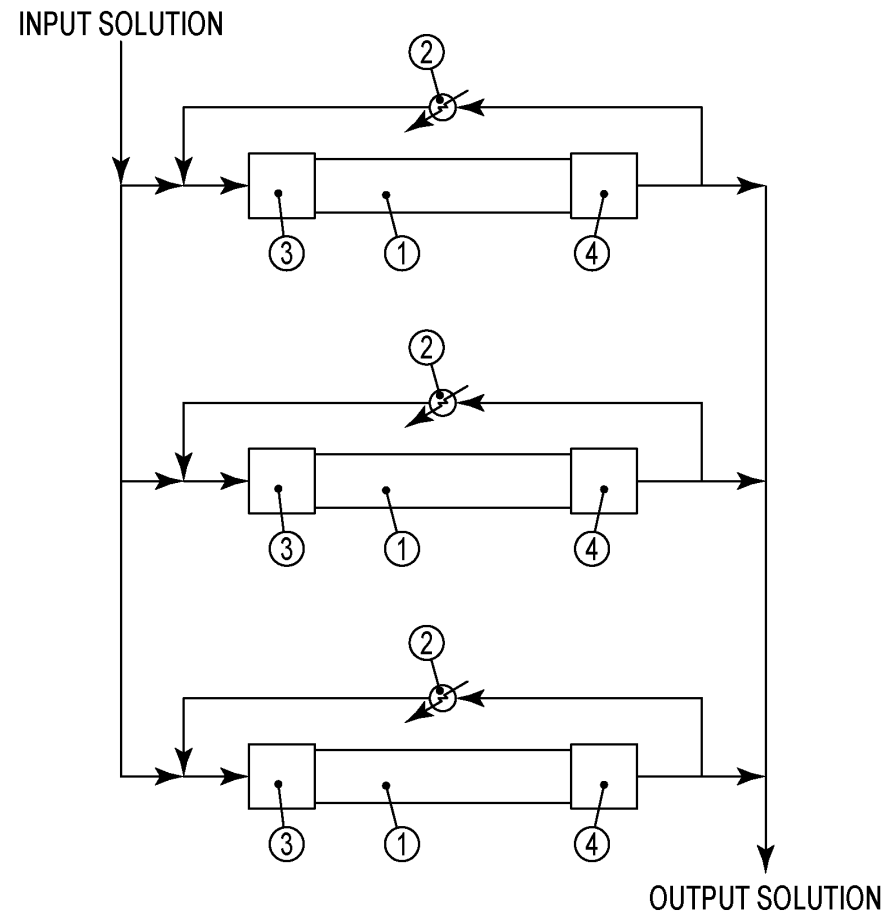




ITEM NO.	DESCRIPTION
1	PHOTOCHEMICAL REACTOR
2	RECYCLING/COOLING
3	SENSOR MODULE
4	PARTS FOR SAMPLING OR ADDING REAGENTS OR VENTING

Figure 1

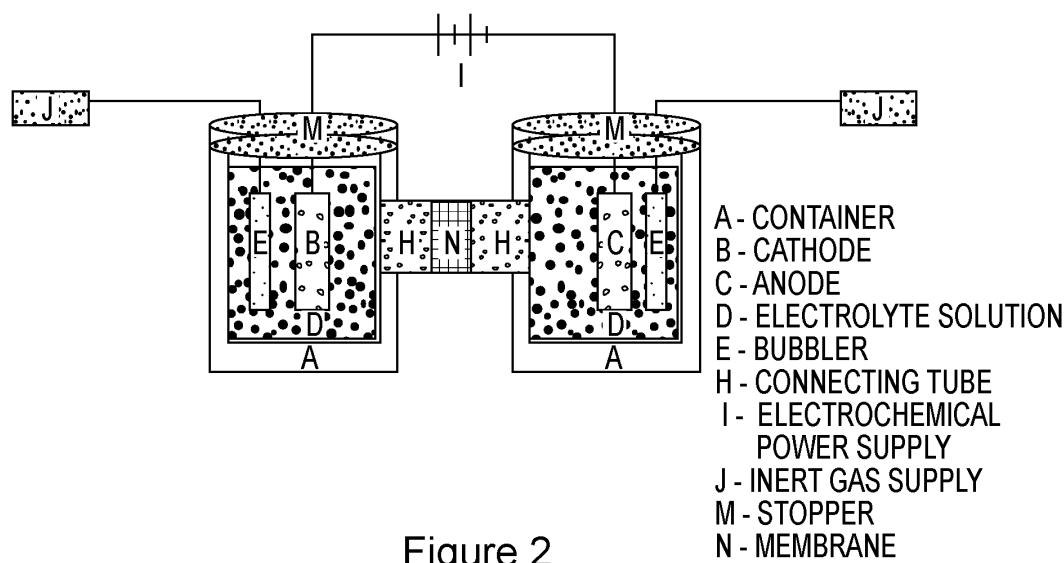


Figure 2

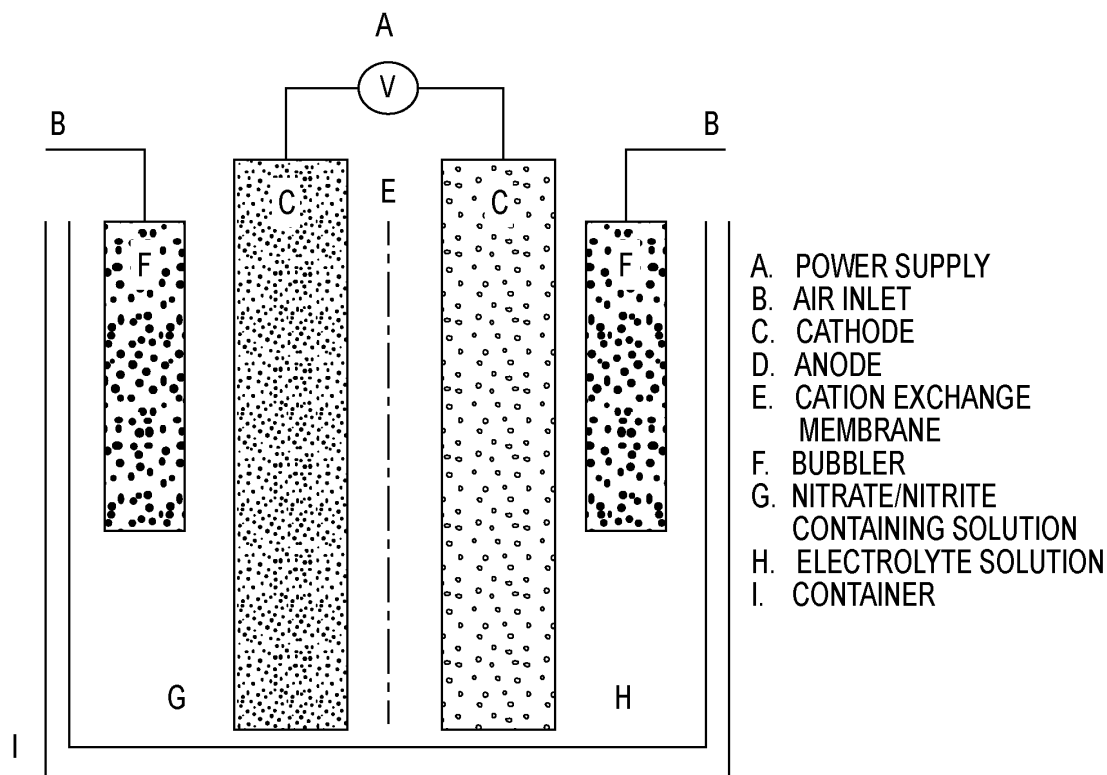


Figure 3

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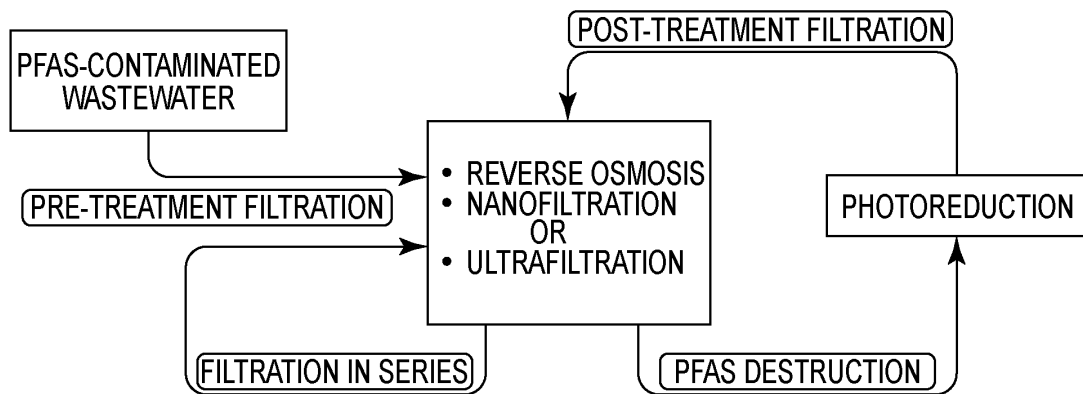


Figure 4

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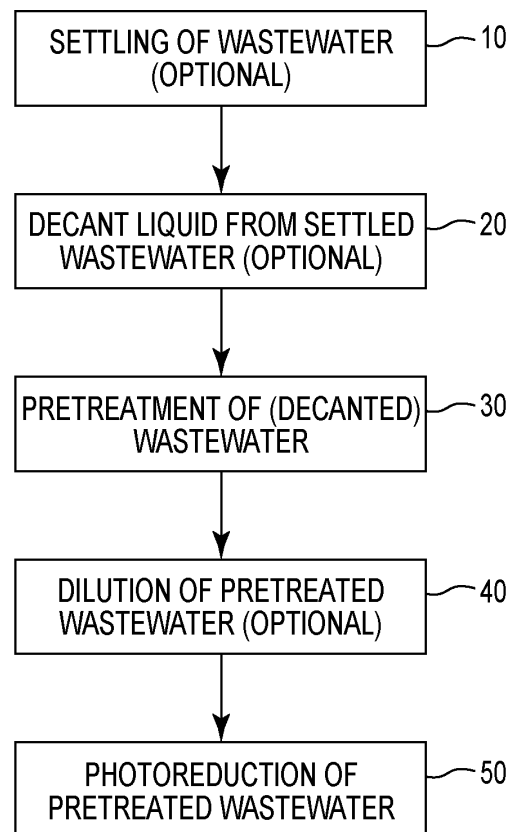


Figure 5

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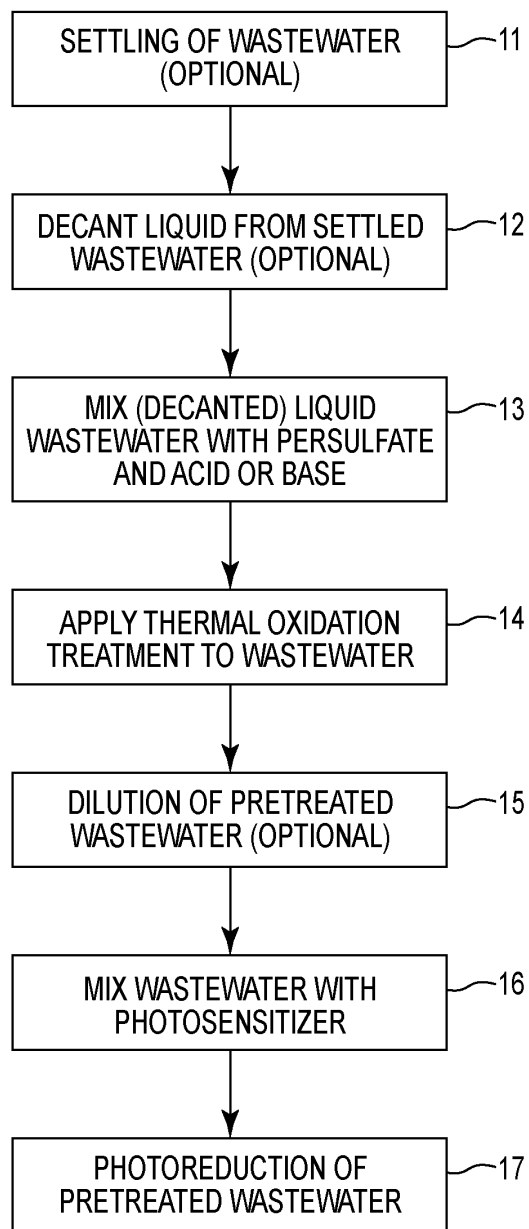


Figure 6

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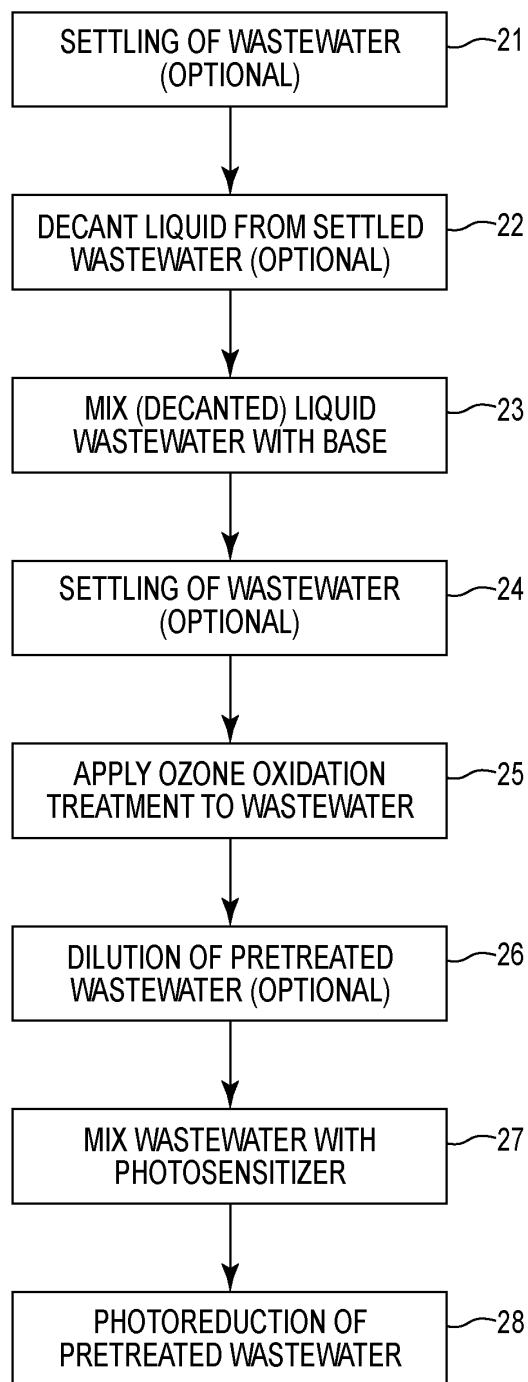


Figure 7

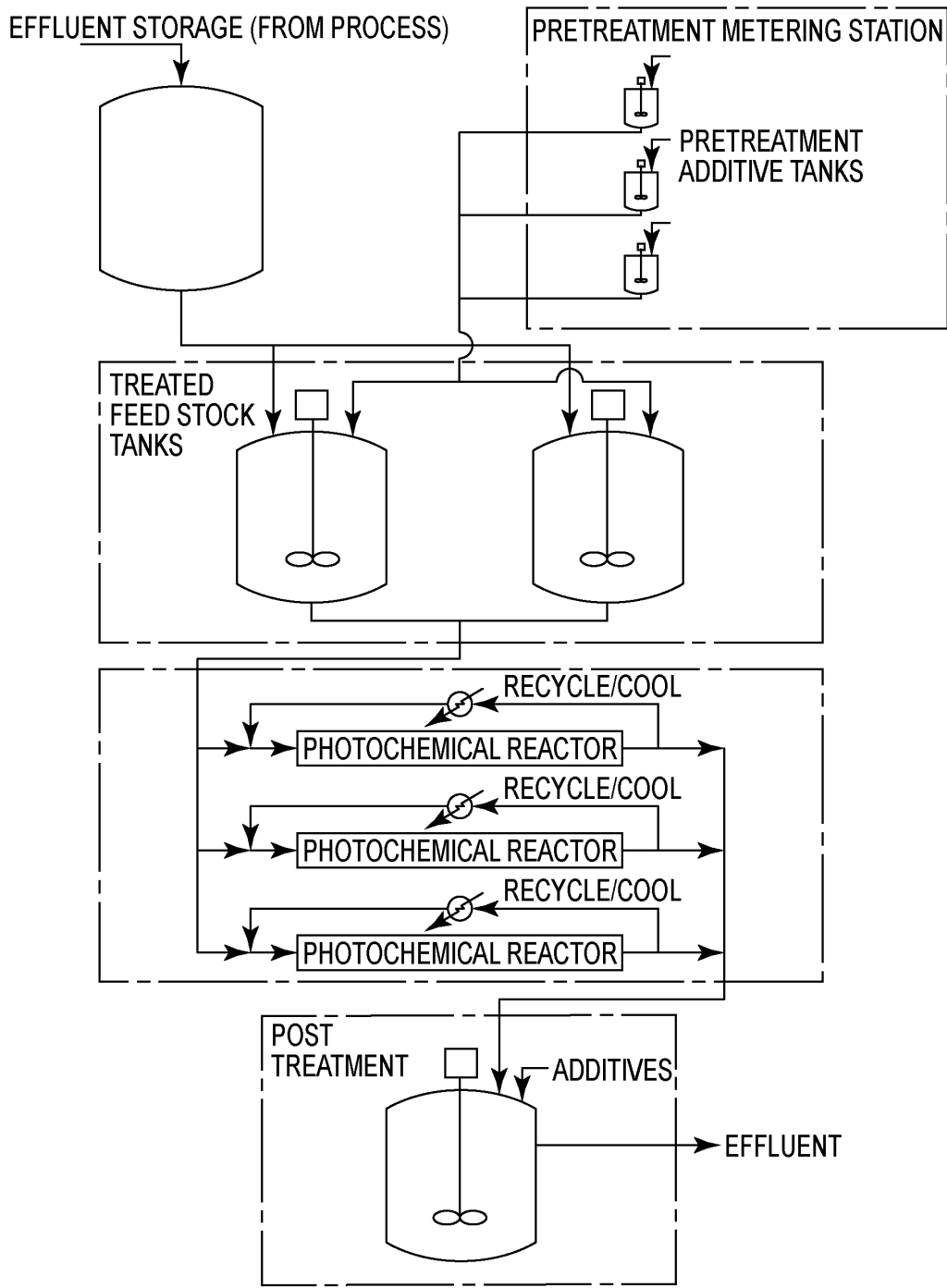


Figure 8

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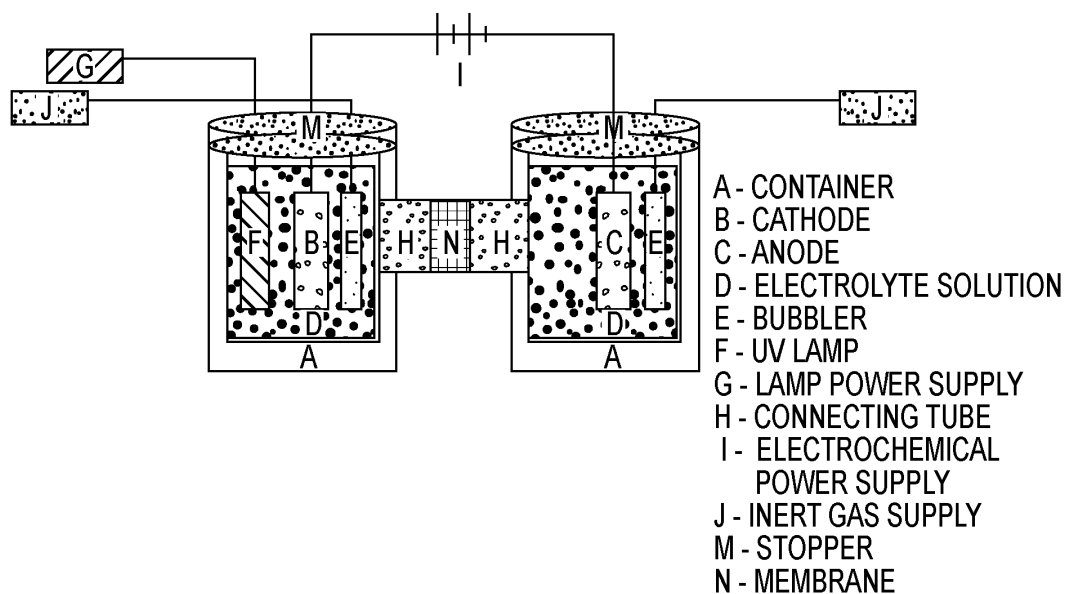


Figure 9

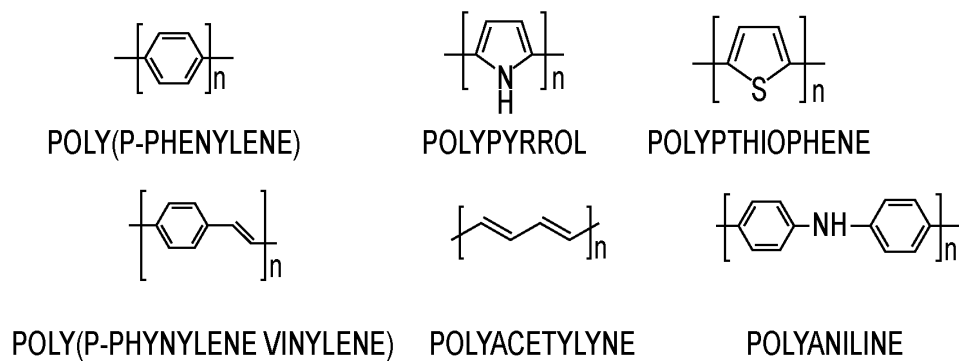
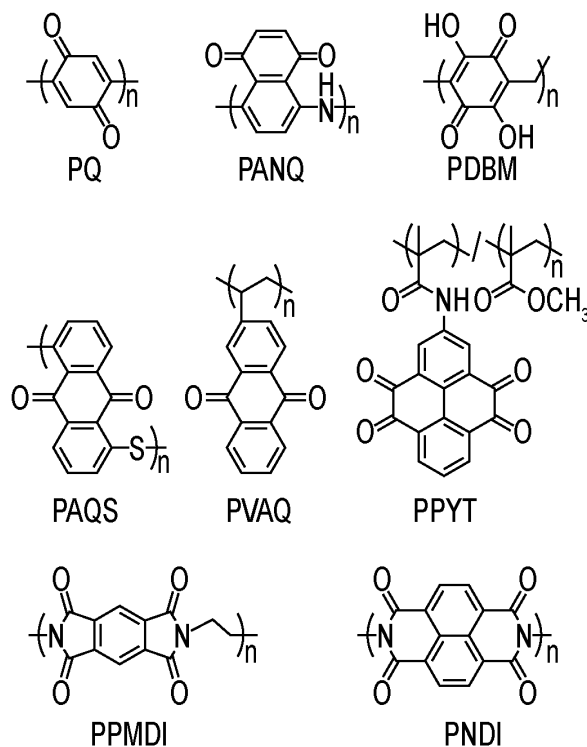


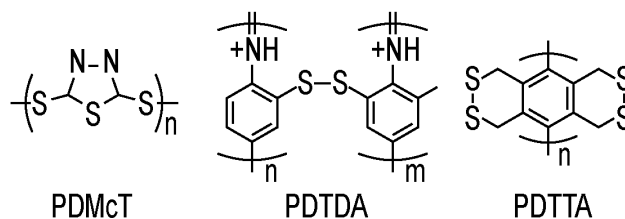
Figure 10

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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

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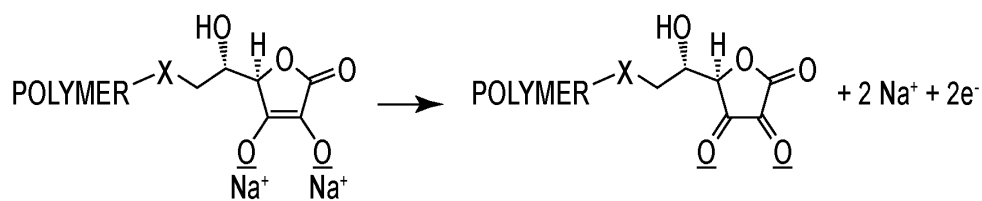


Figure 13

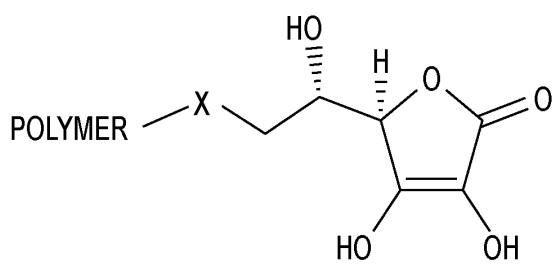


Figure 14

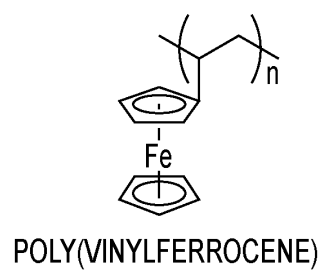


Figure 15

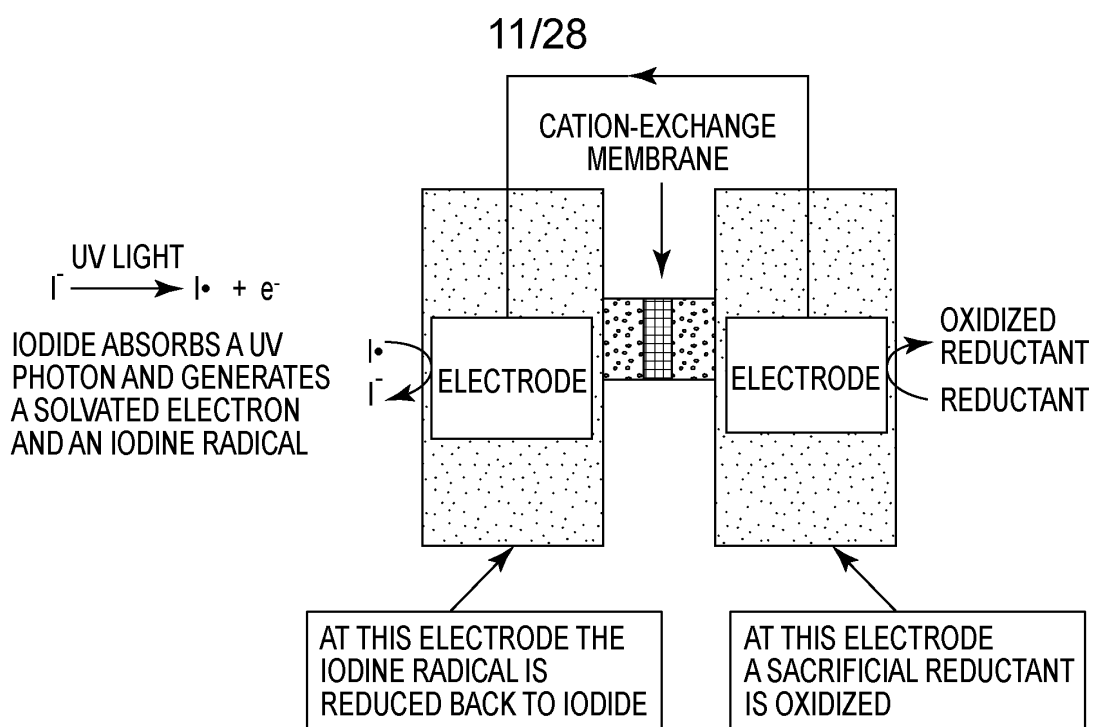


Figure 16

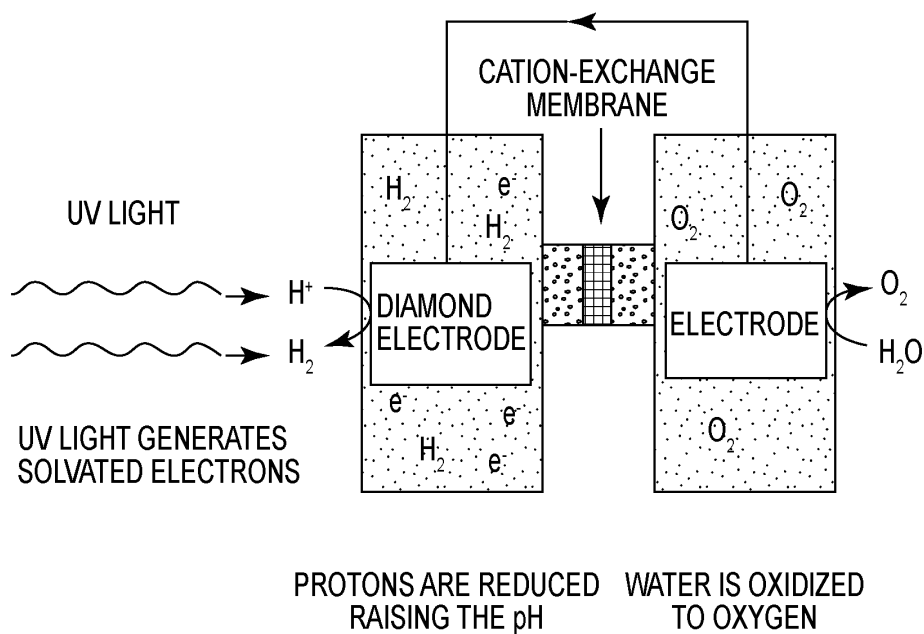


Figure 17

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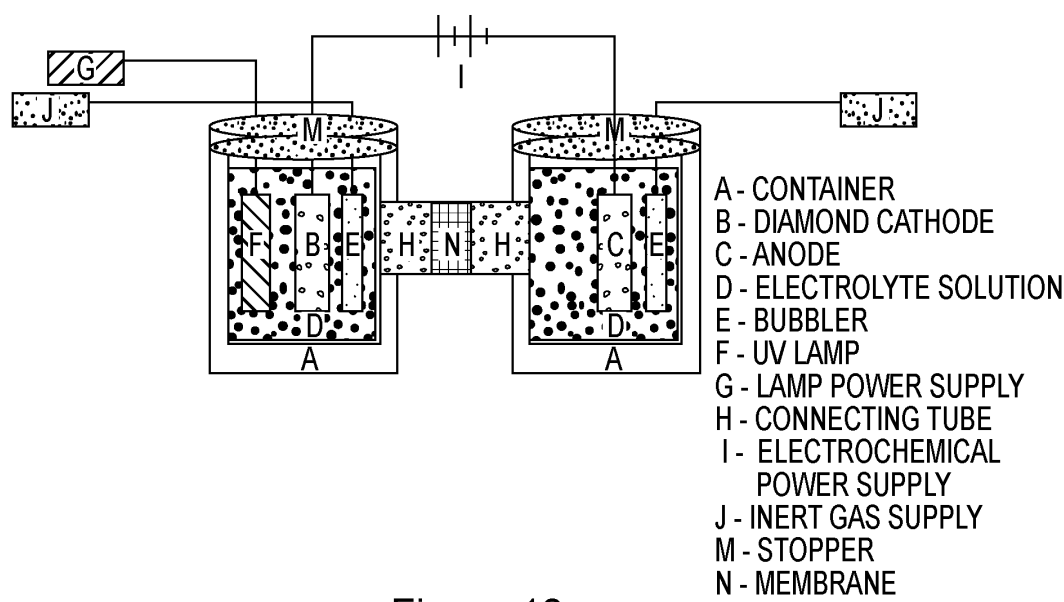


Figure 18

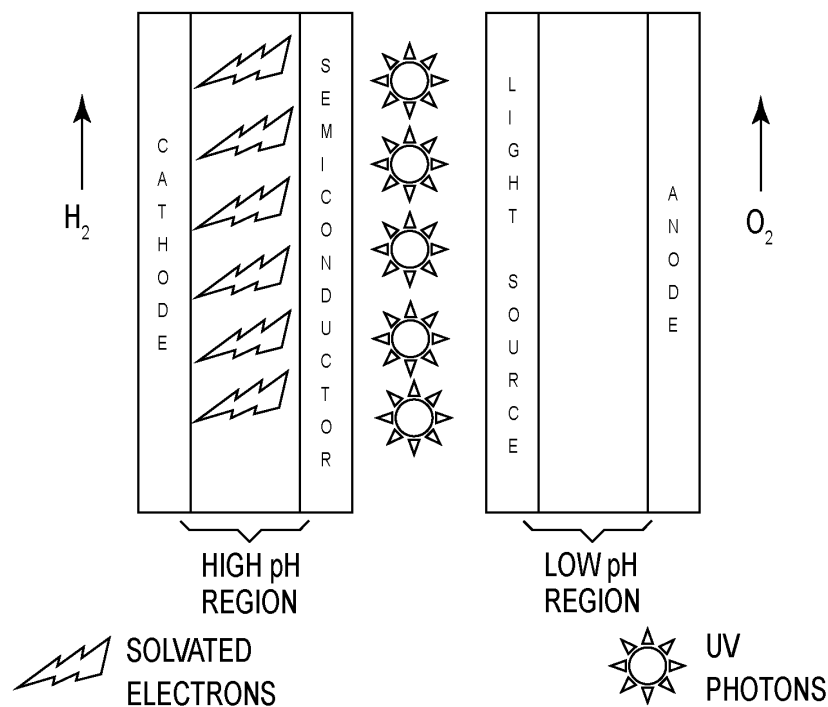


Figure 19

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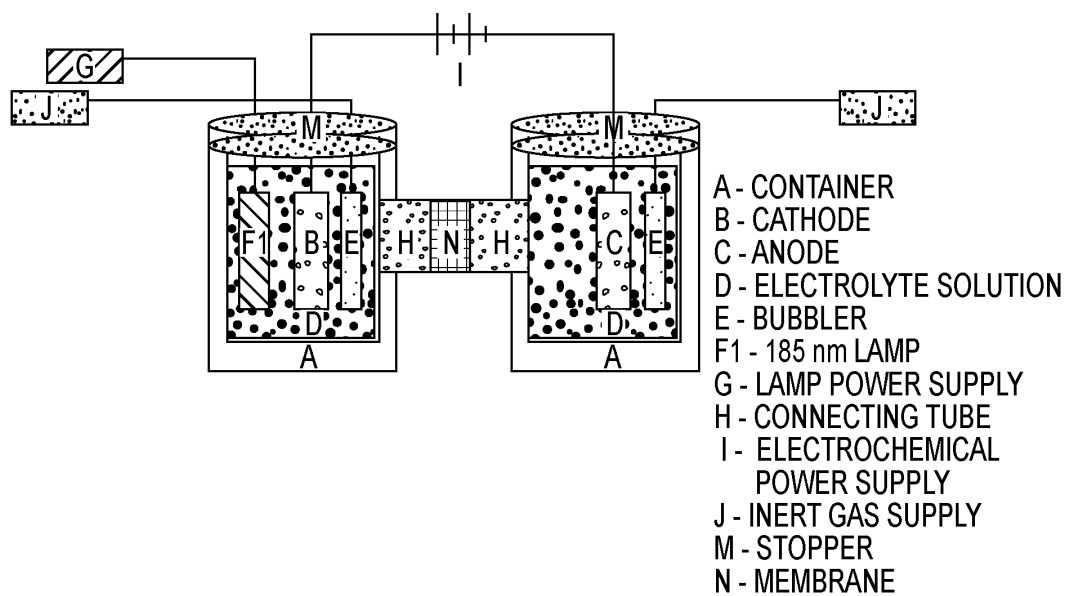
SCHEMATIC FOR PHOTO-ELECTROLYTIC 185
nm IRRADIATION WITH HYDROGEN EVOLUTION

Figure 20

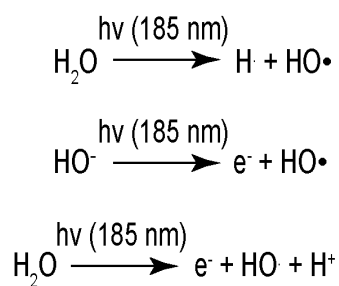


Figure 21

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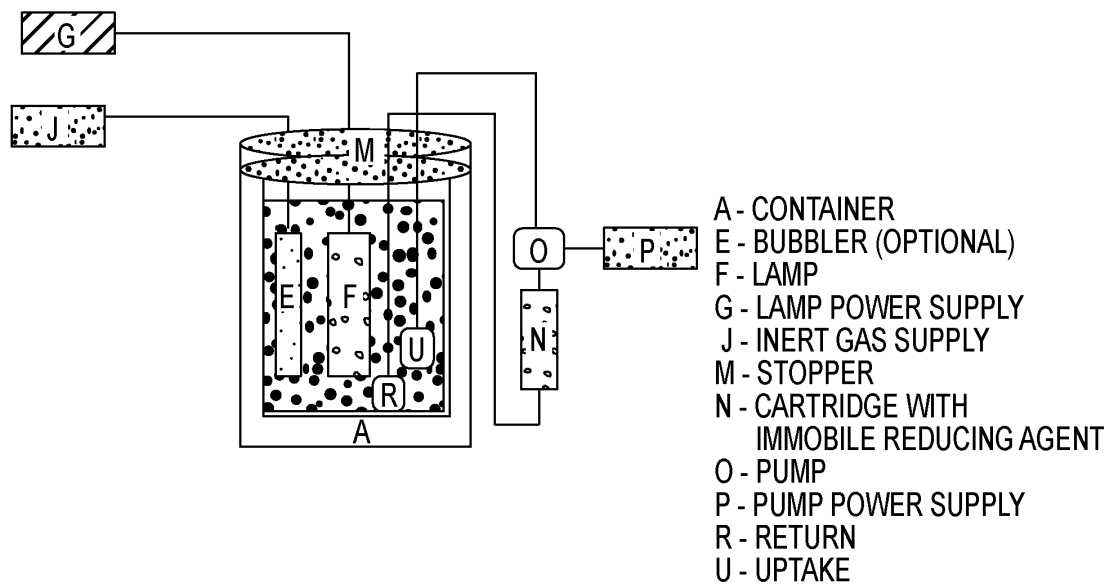


Figure 22

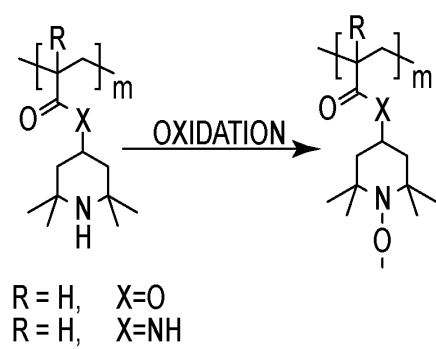


Figure 23

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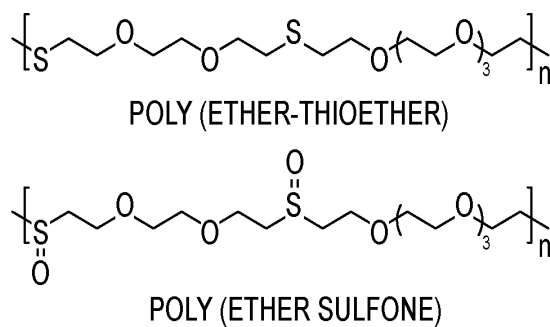


Figure 24

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

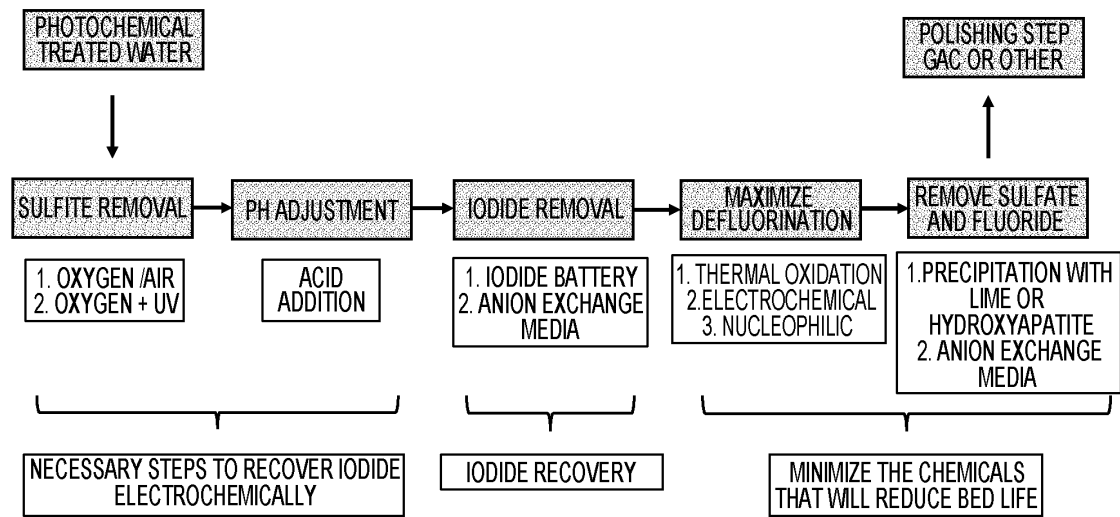


Figure 26

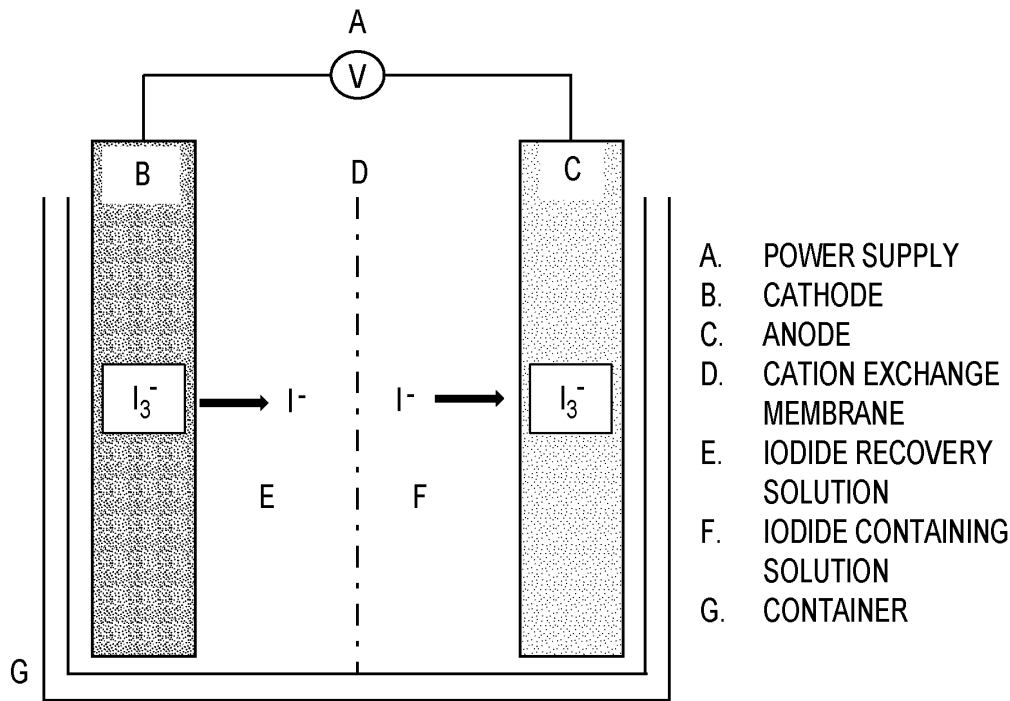


Figure 27

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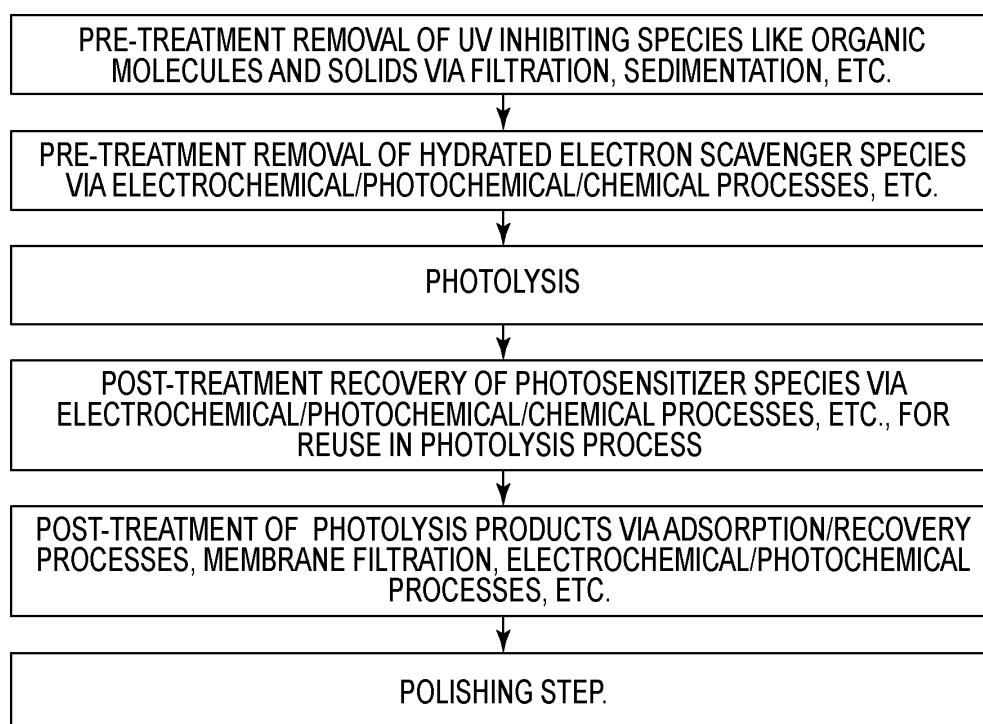


Figure 28

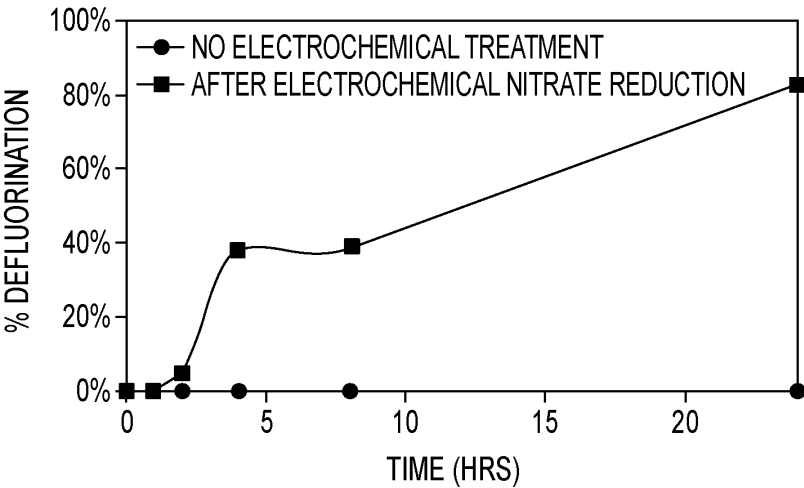


Figure 29

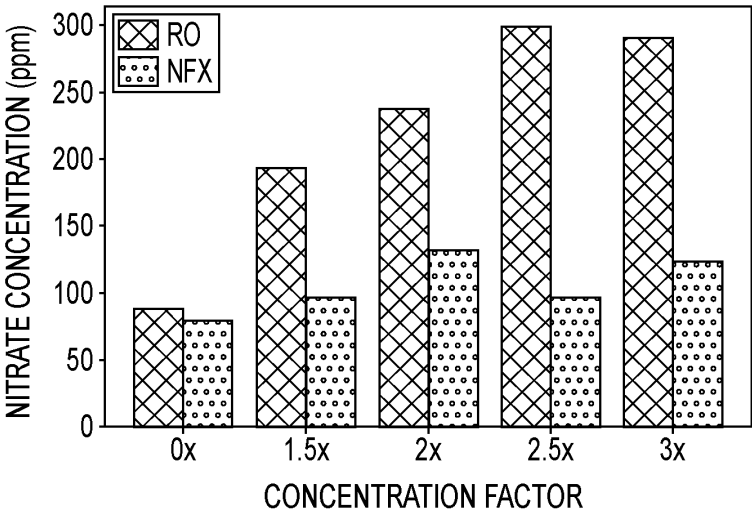


Figure 30

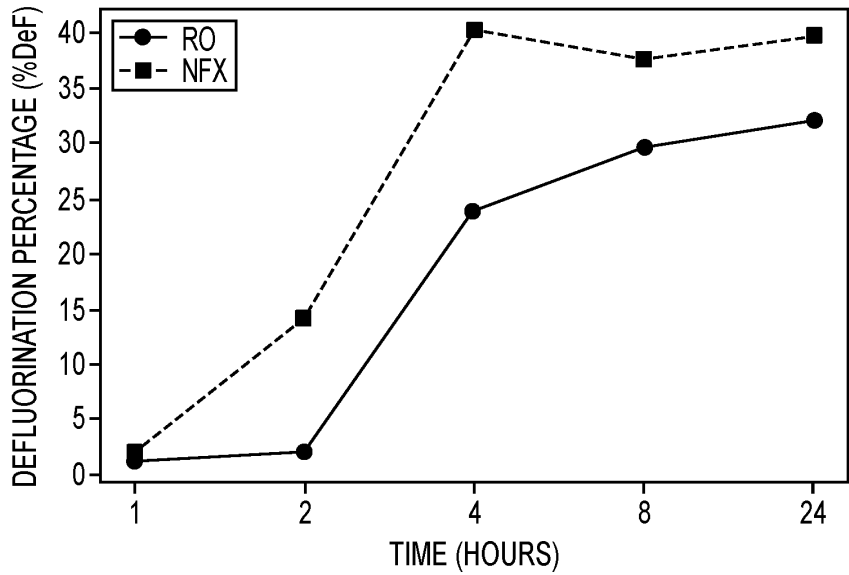


Figure 31

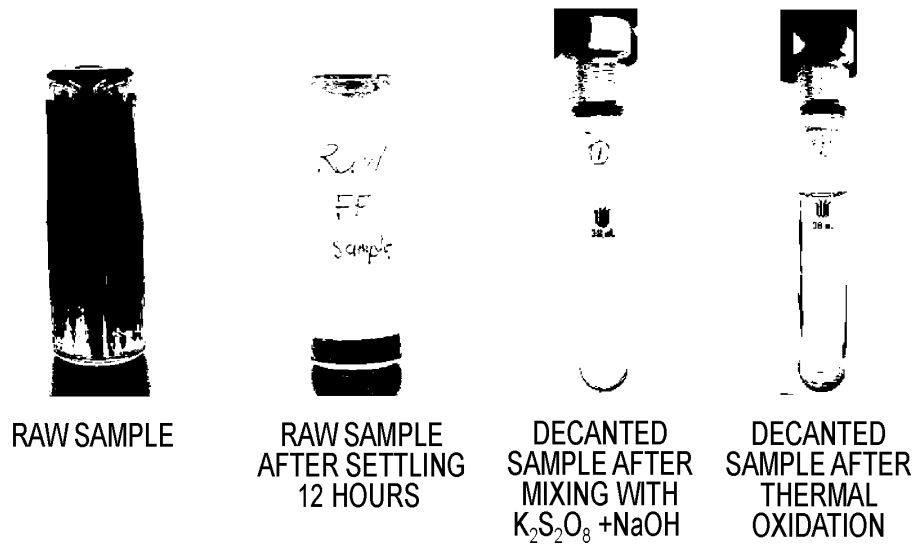


Figure 32

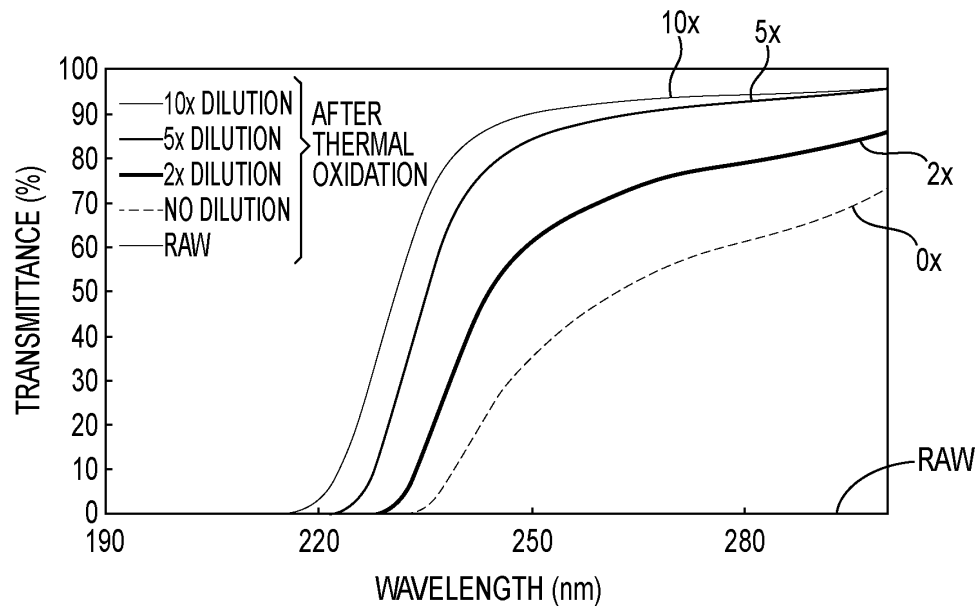


Figure 33

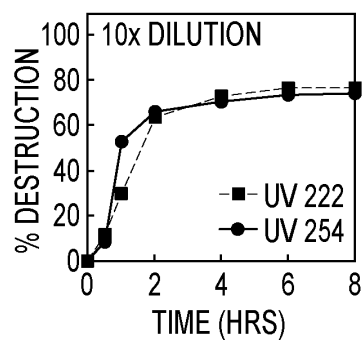


Figure 34a

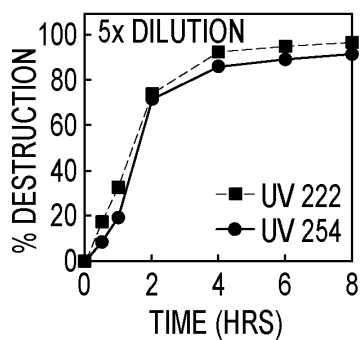


Figure 34b

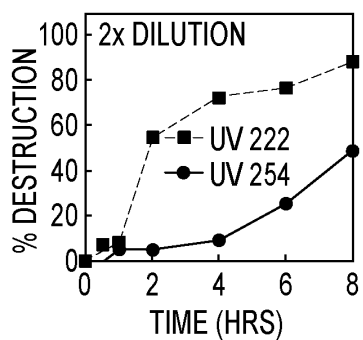


Figure 34c

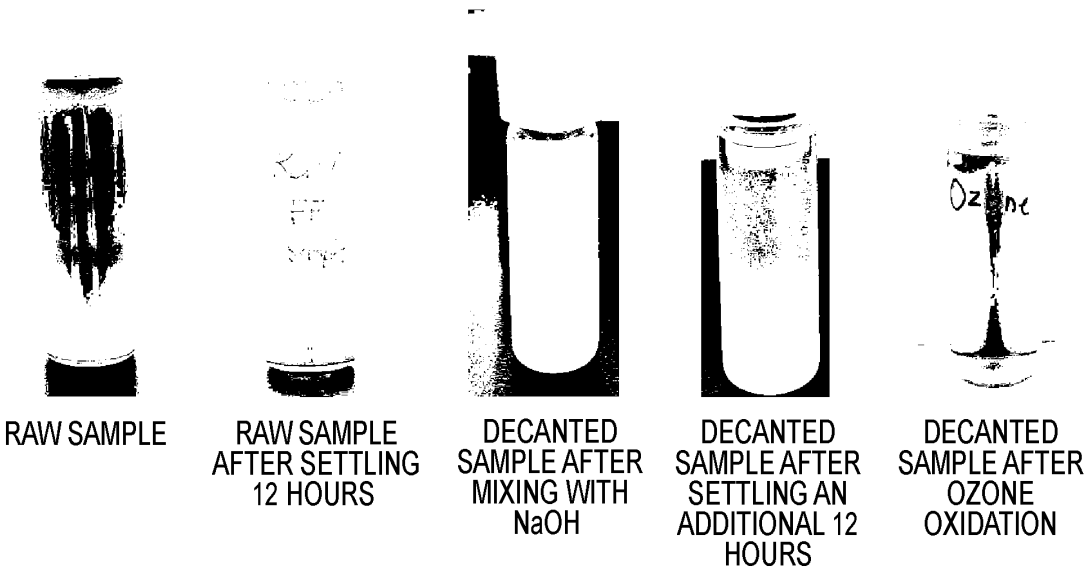


Figure 35

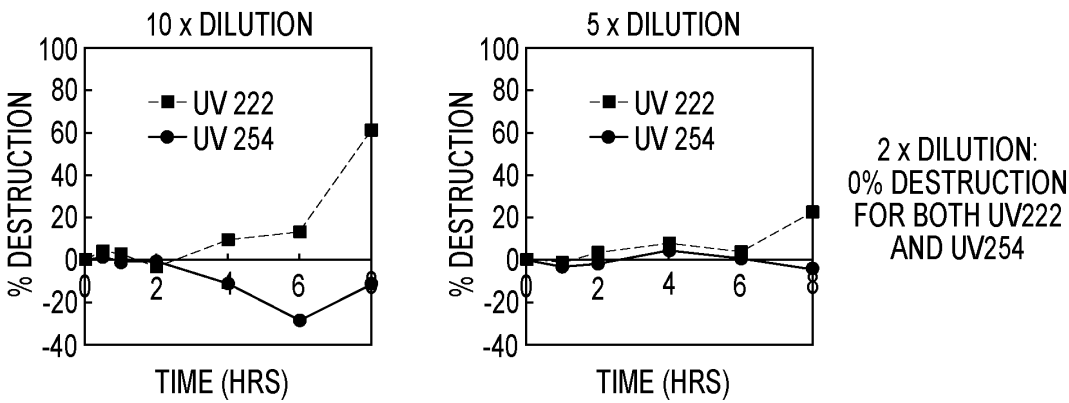


Figure 36

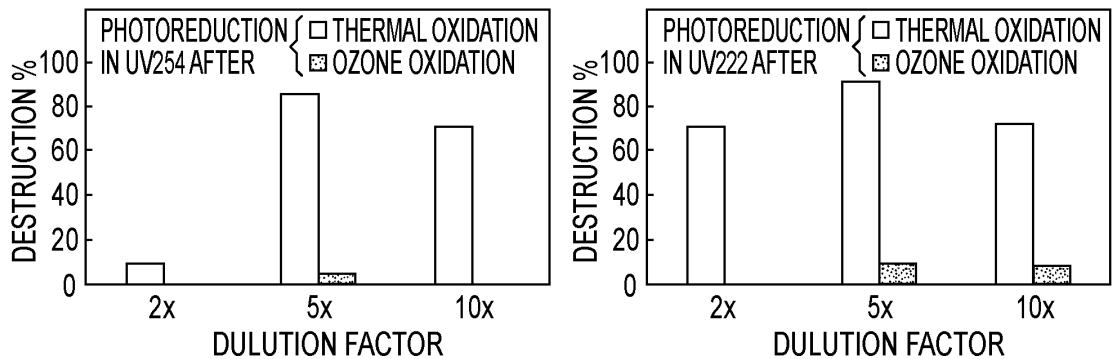


Figure 37

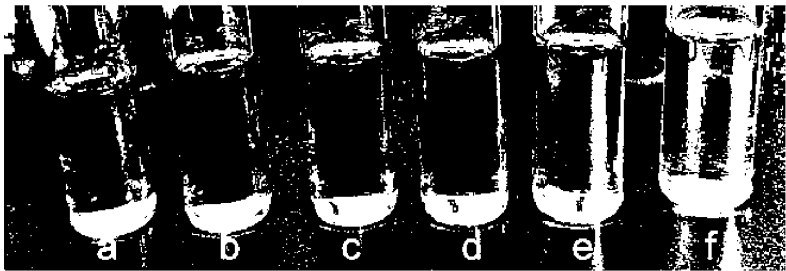


Figure 38

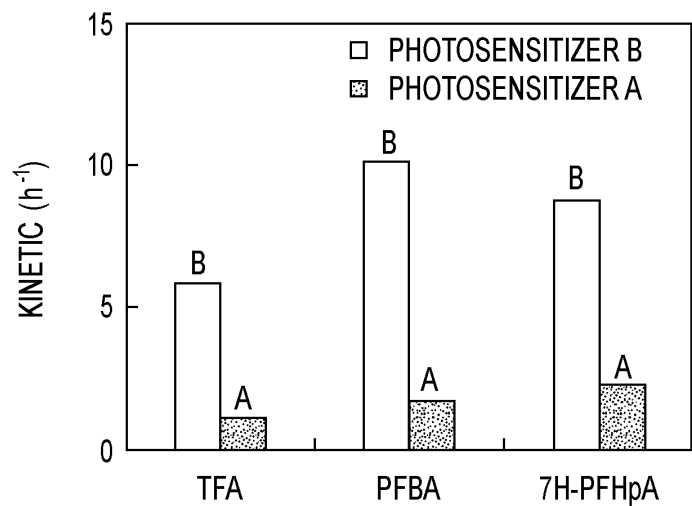


Figure 39

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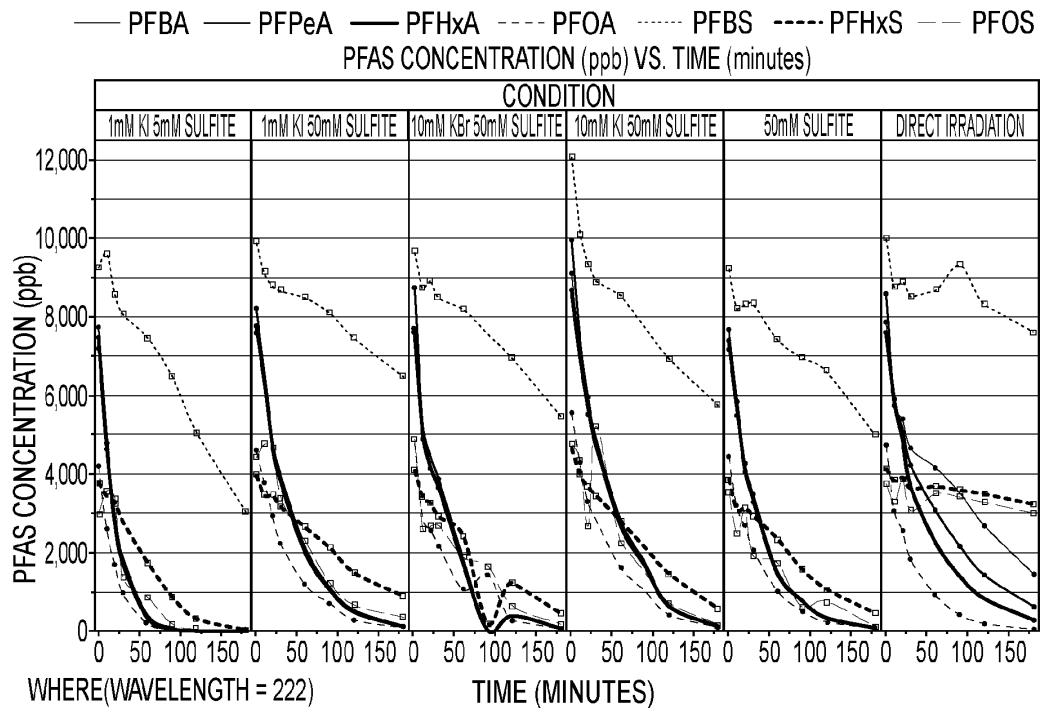


Figure 40

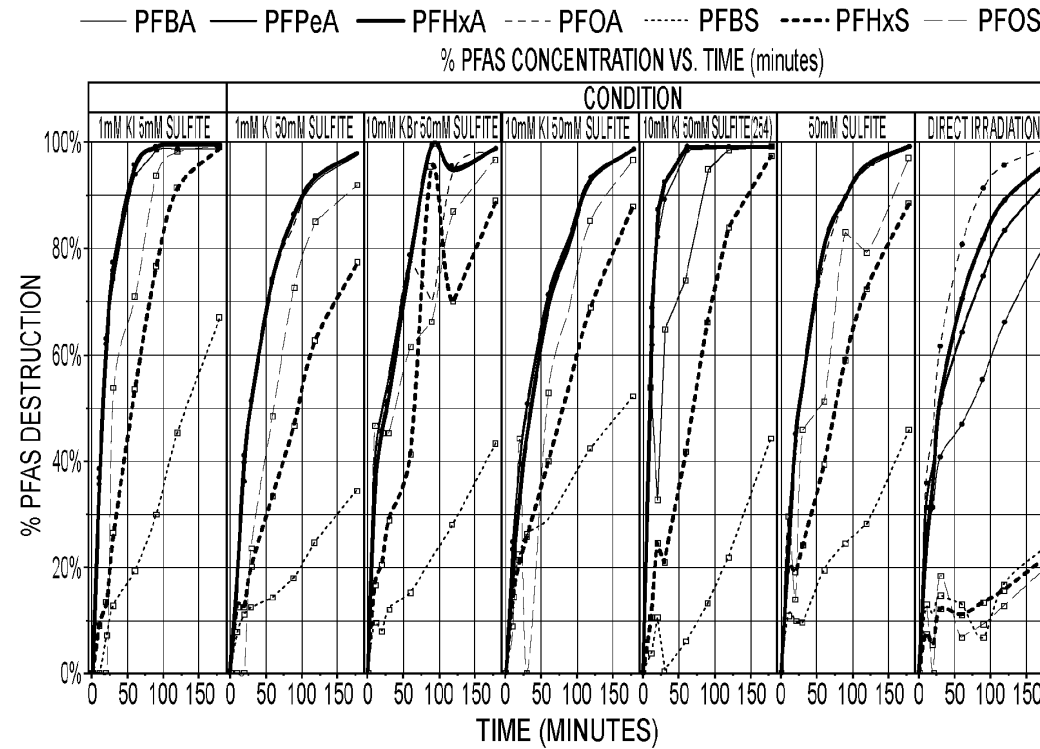


Figure 41

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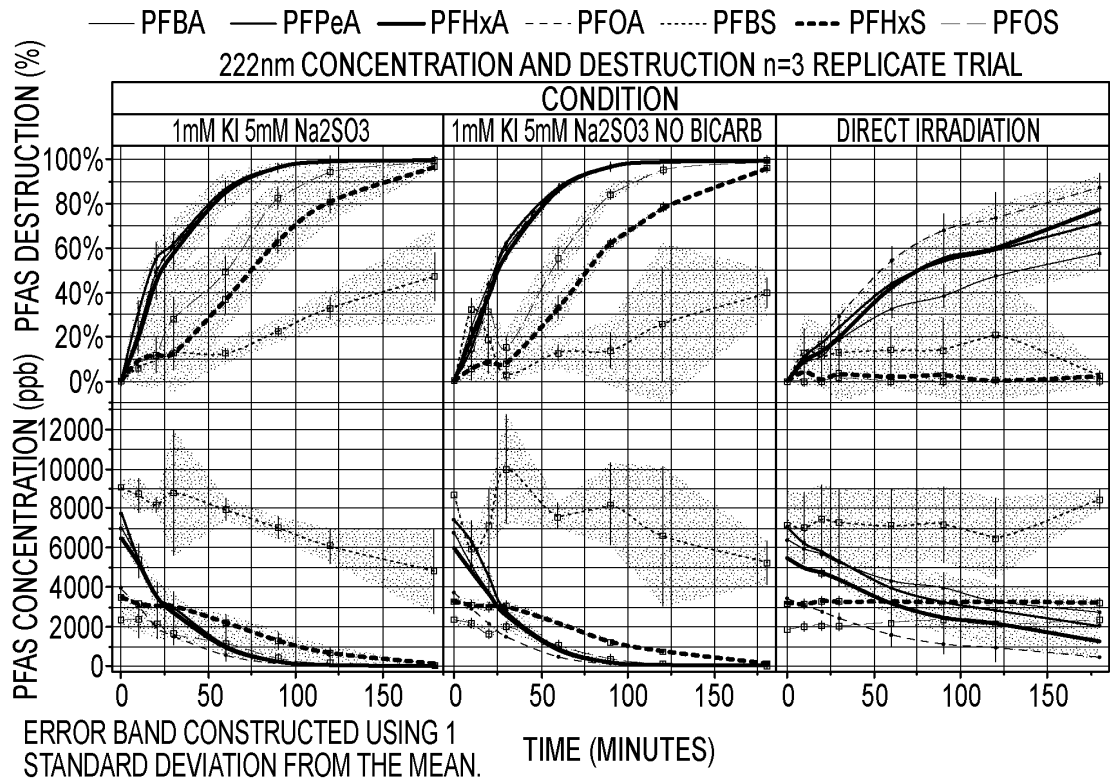


Figure 42

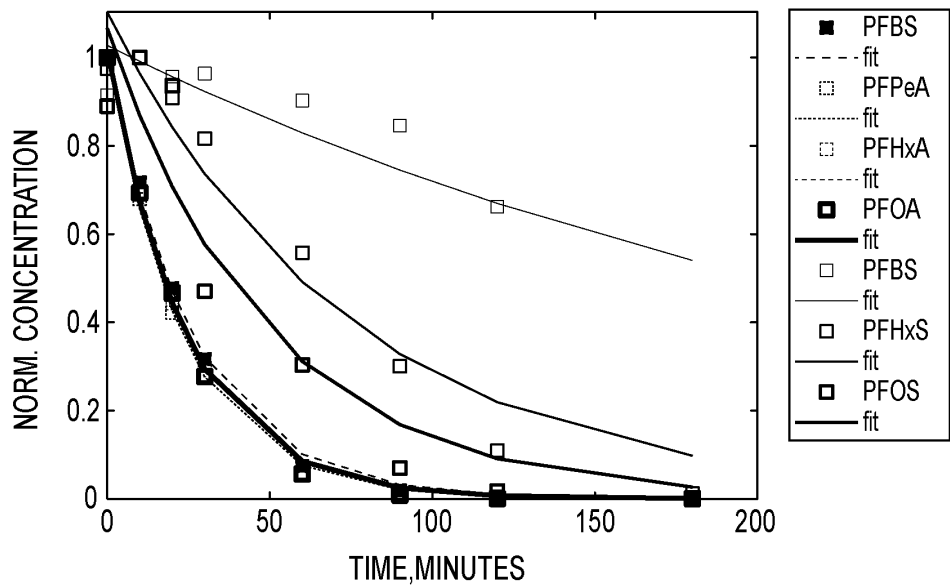


Figure 43

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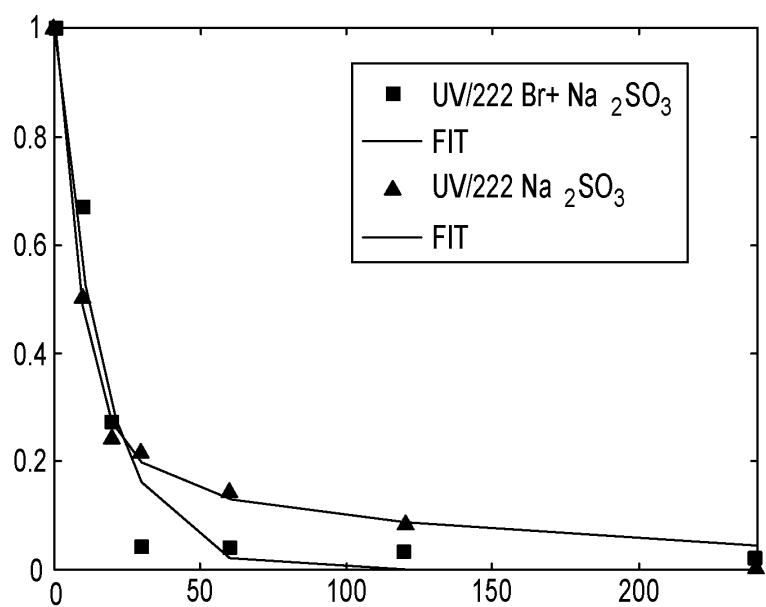


Figure 44

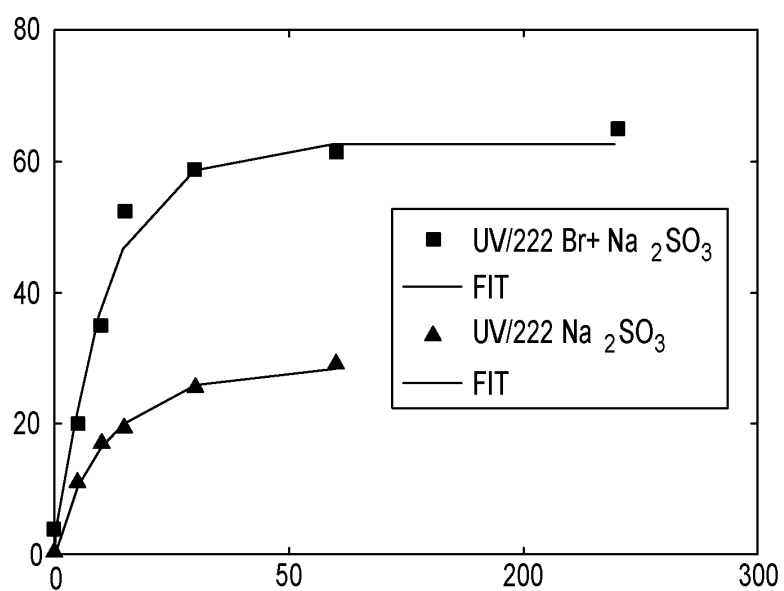


Figure 45

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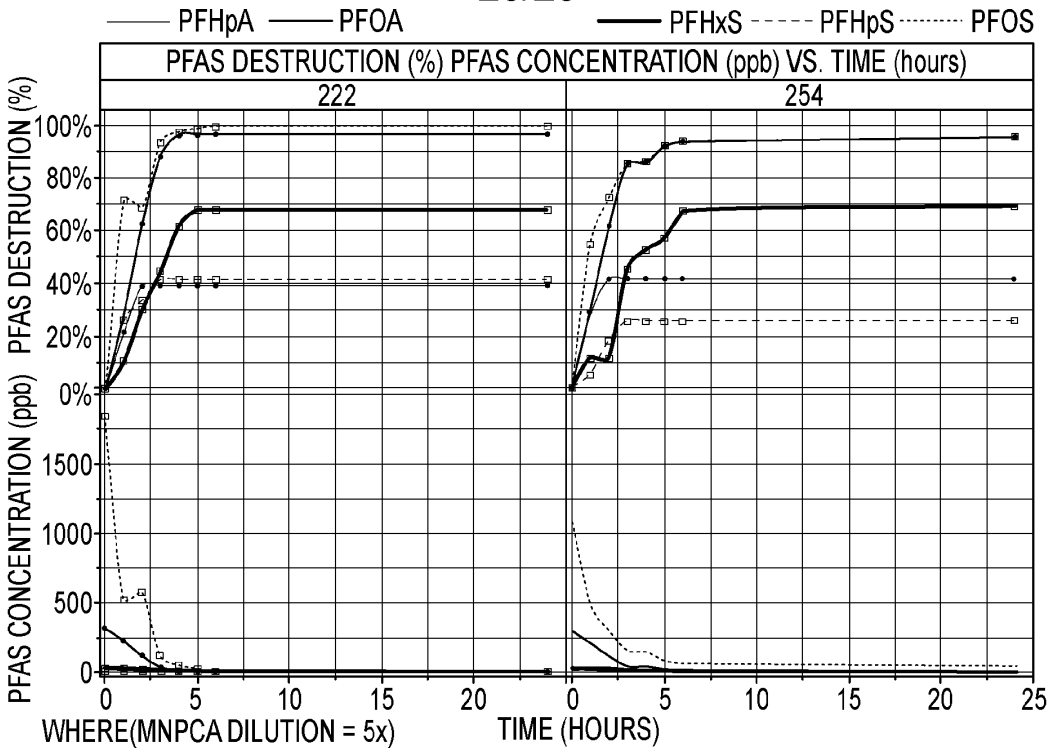


Figure 46

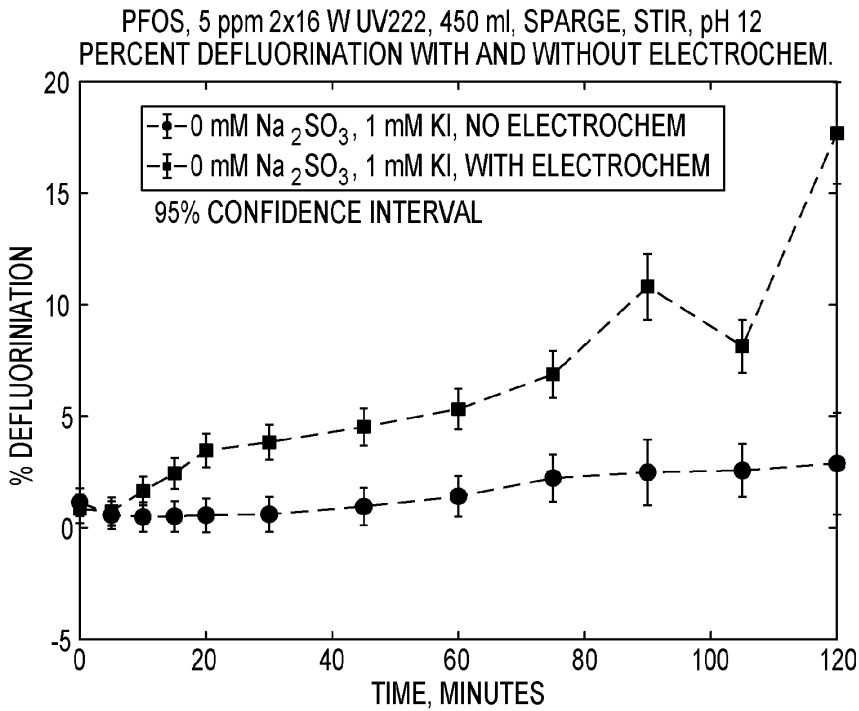


Figure 47

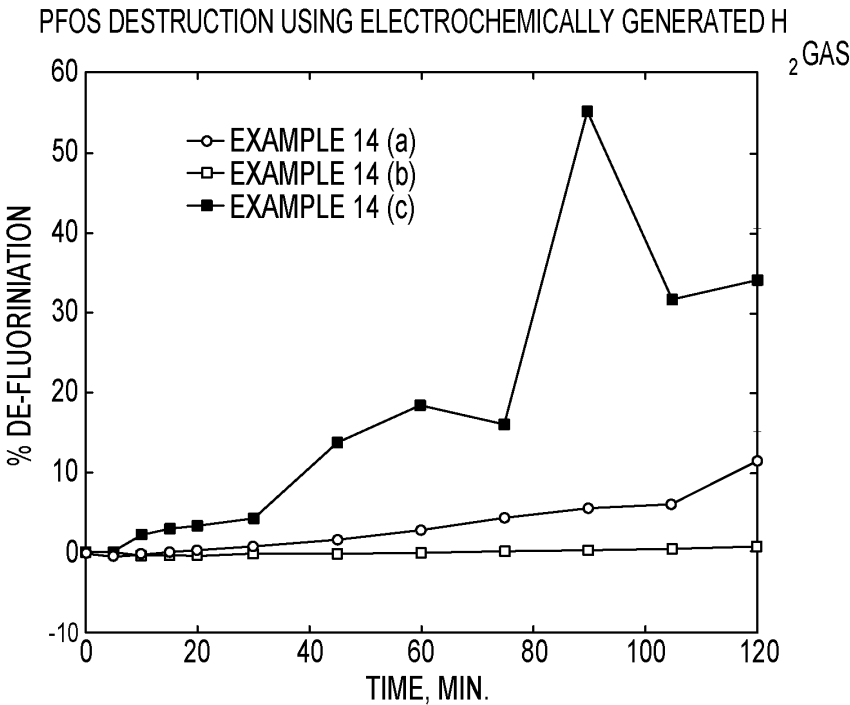


Figure 48

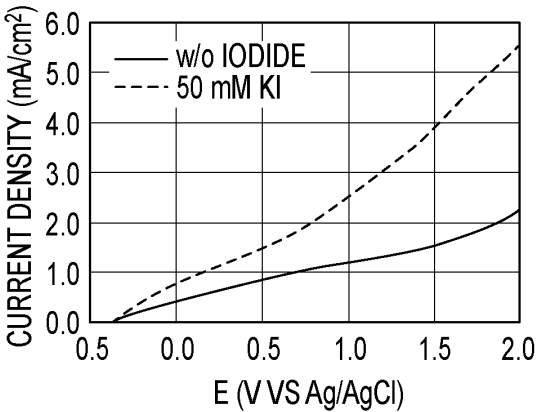


Figure 49a

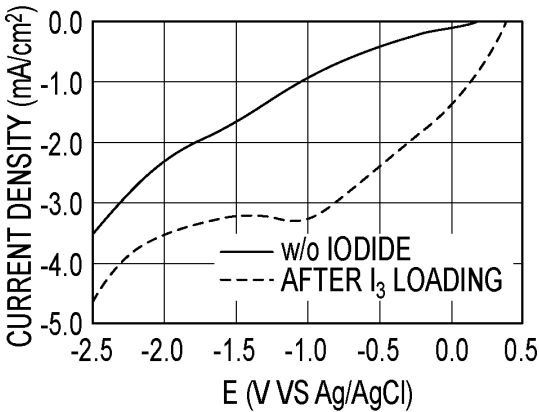


Figure 49b

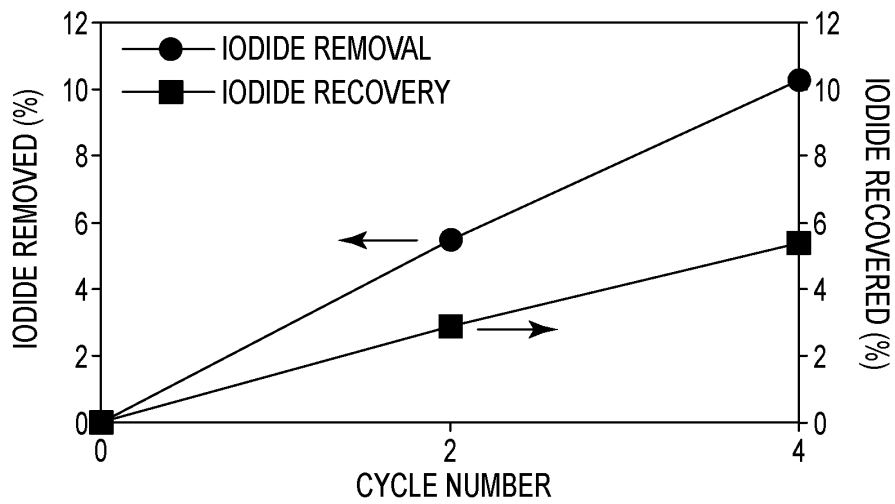


Figure 50