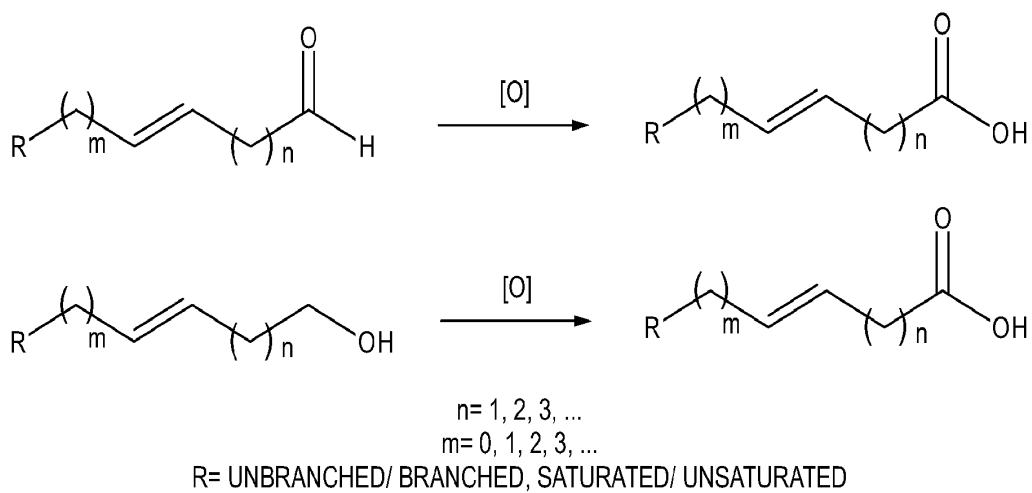
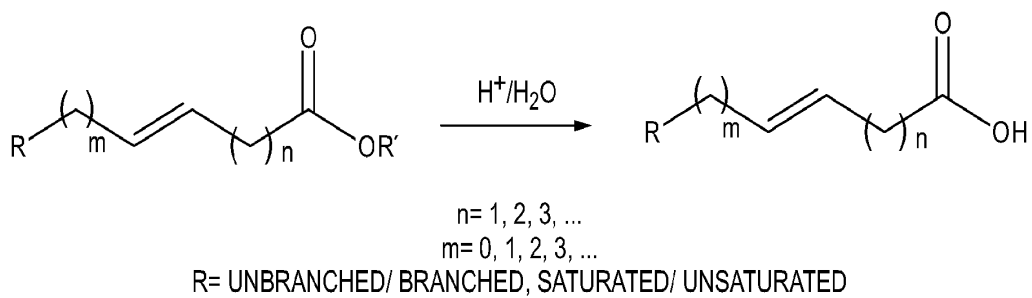
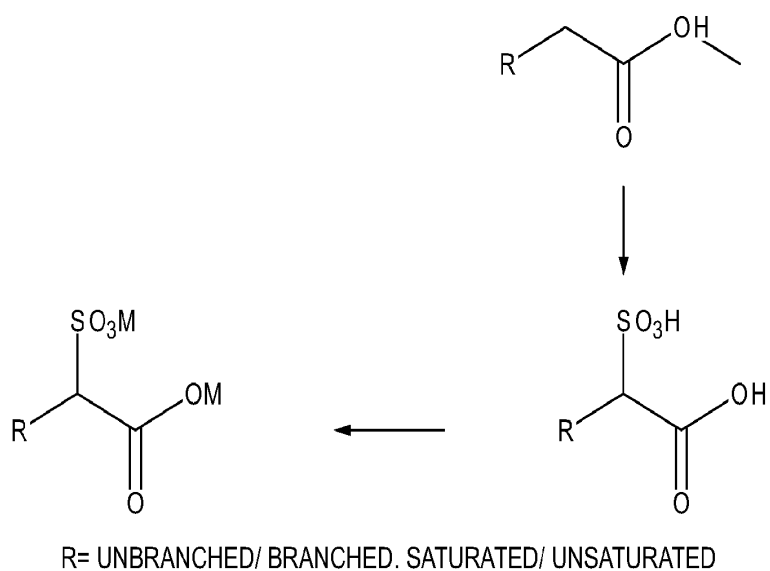
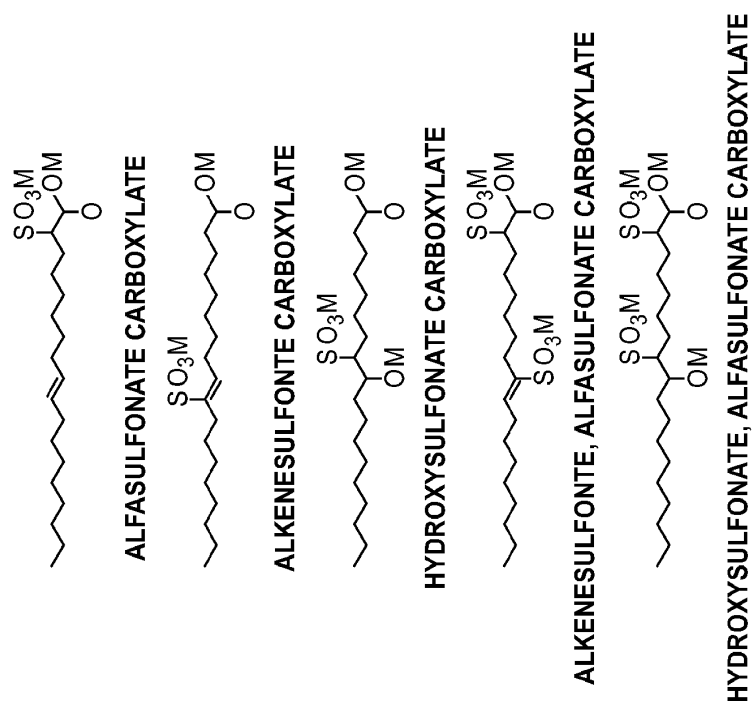


1 / 10

**FIG. 1****FIG. 2****FIG. 3**



PRODUCT CAN BE ANY COMBINATIONS OF MOLECULES
OR THEIR RESONANCES STRUCTURES

M= Na

FIG. 4

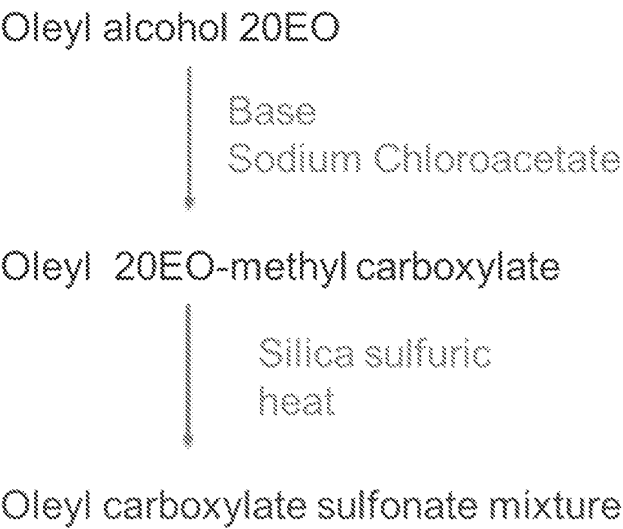


FIGURE 5

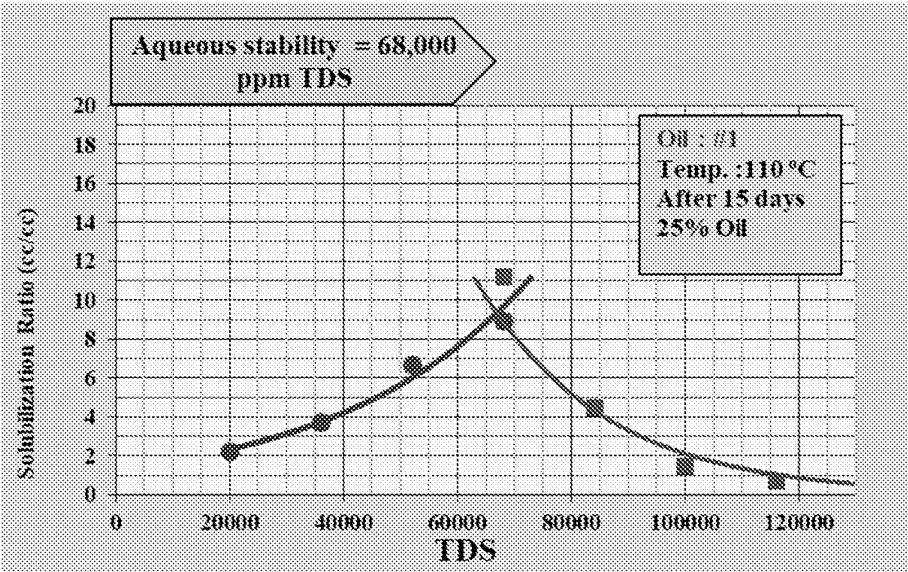


FIGURE 6

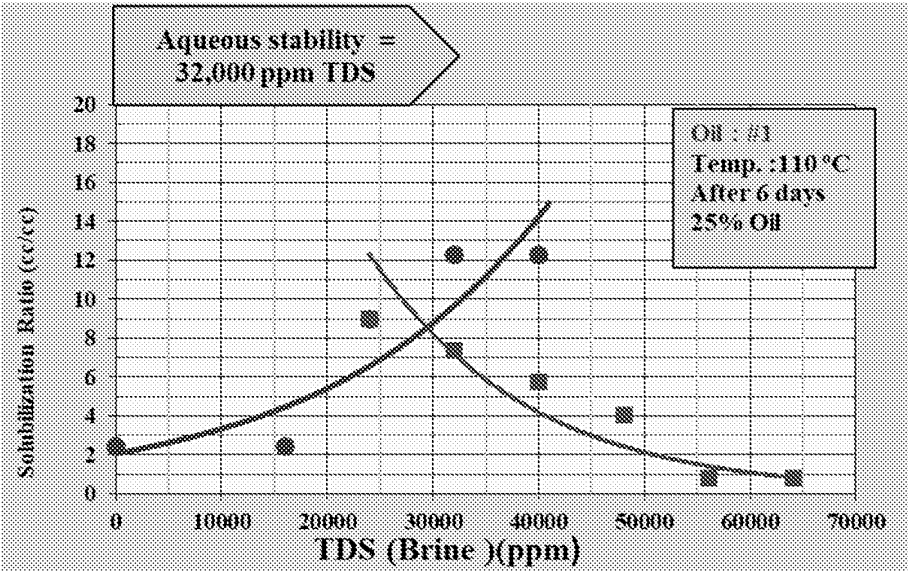


FIGURE 7

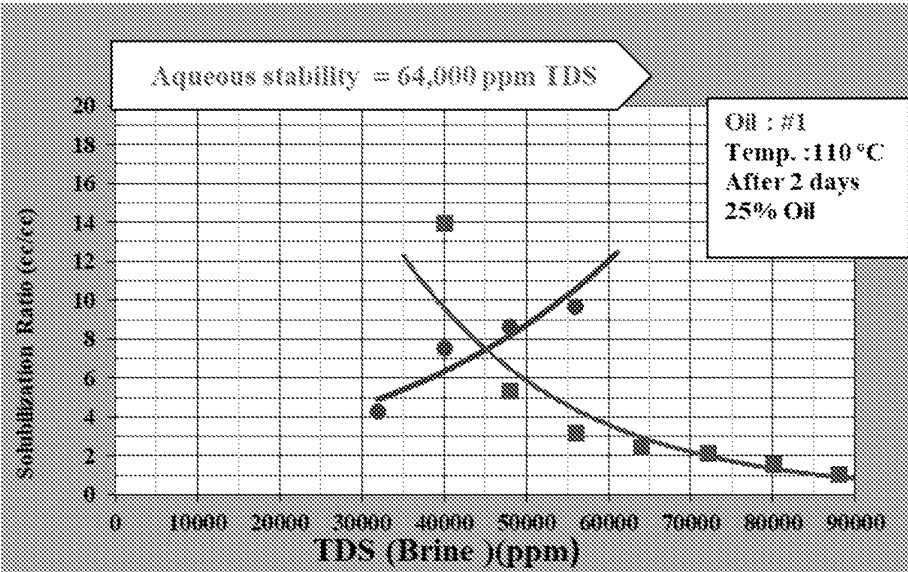


FIGURE 8

5 / 10

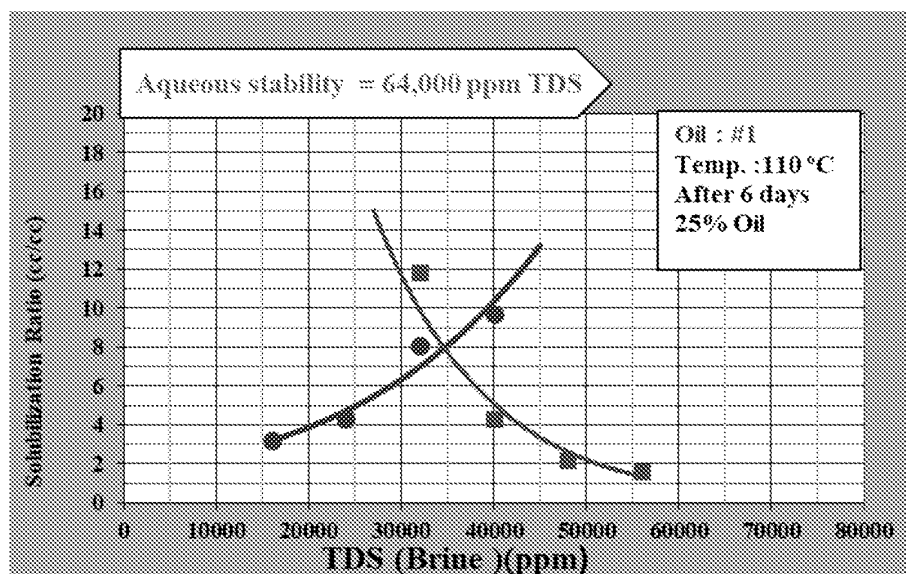


FIGURE 9

Unsaturated ester

- 1) Sulfonation
- 2) Base hydrolysis

Surfactant including both sulfonate/s and
carboxylate

FIGURE 10

6 / 10

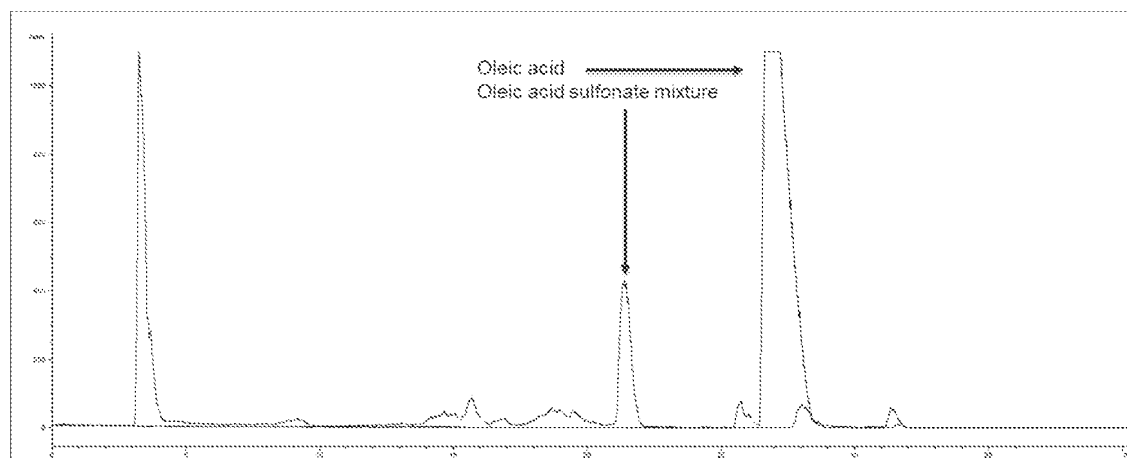


FIGURE 11

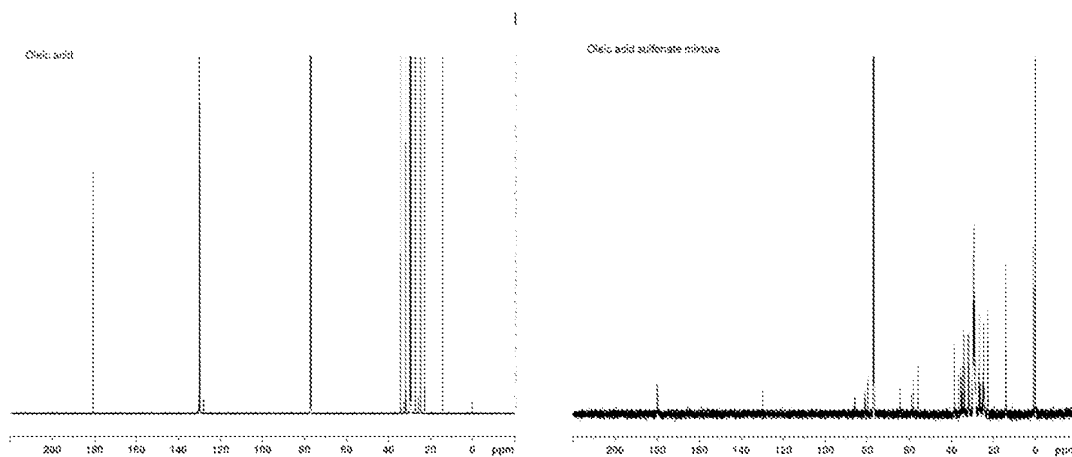
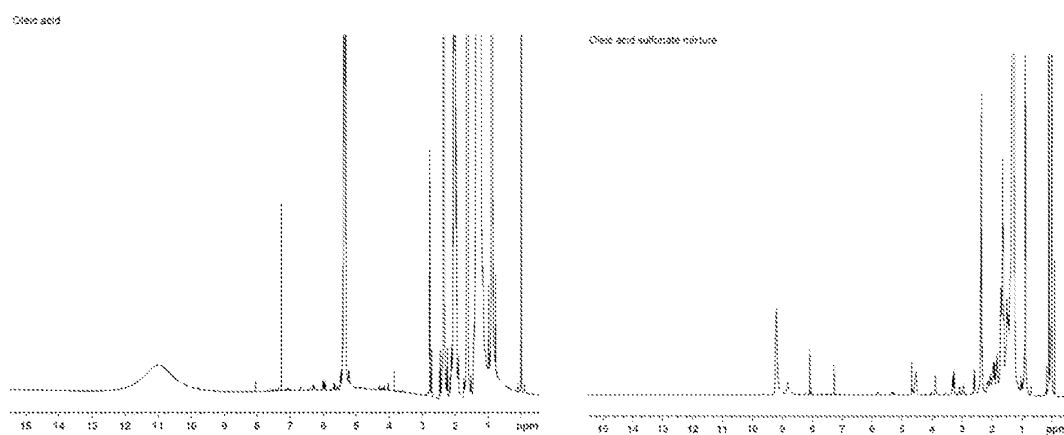
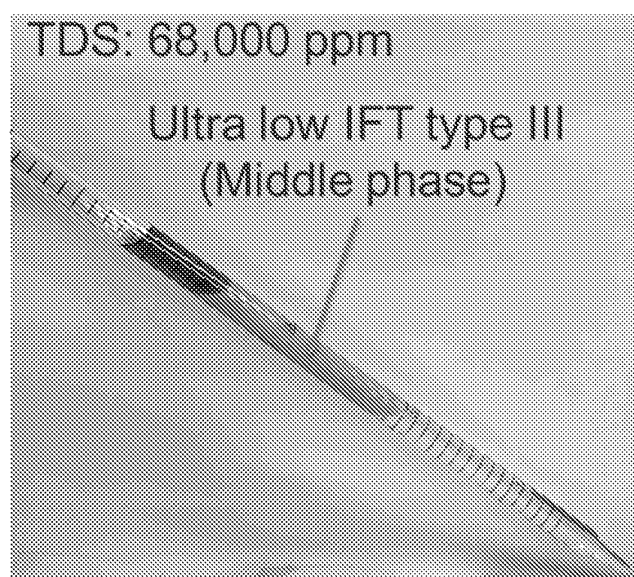
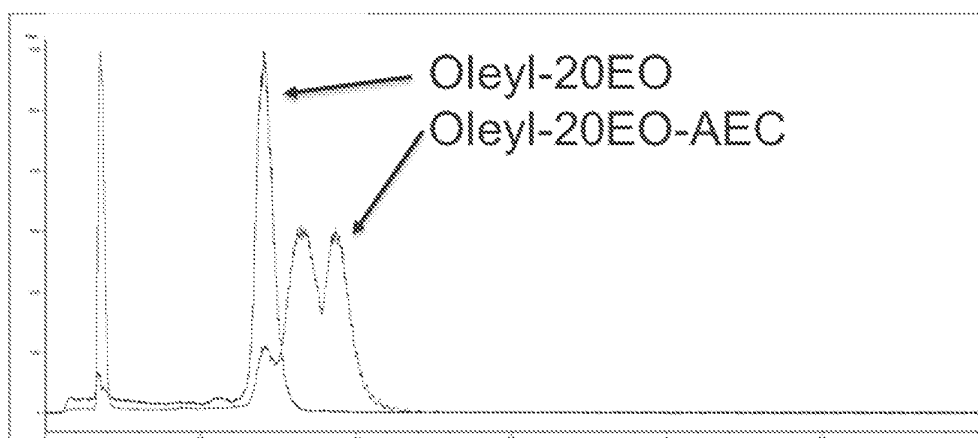
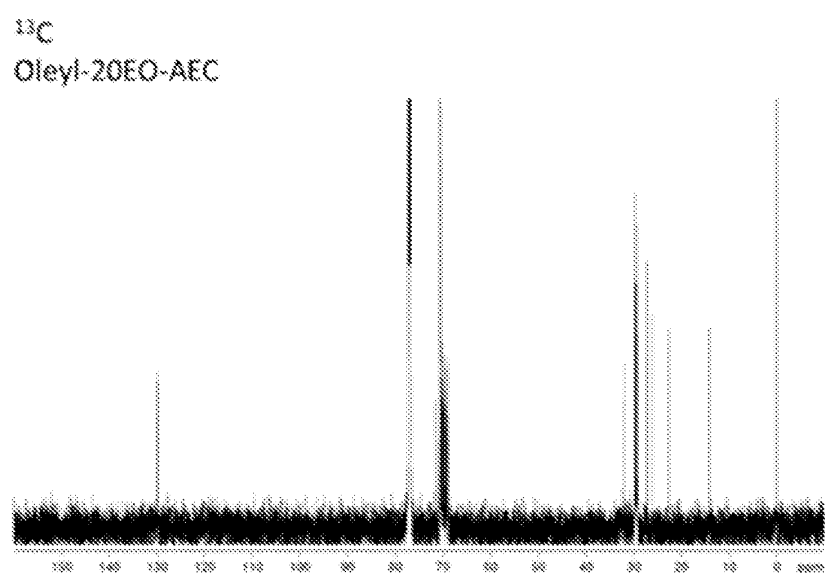
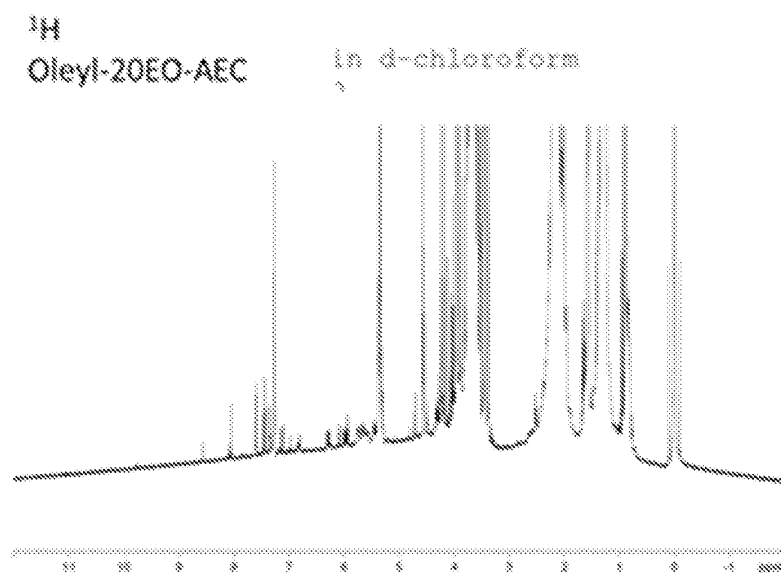
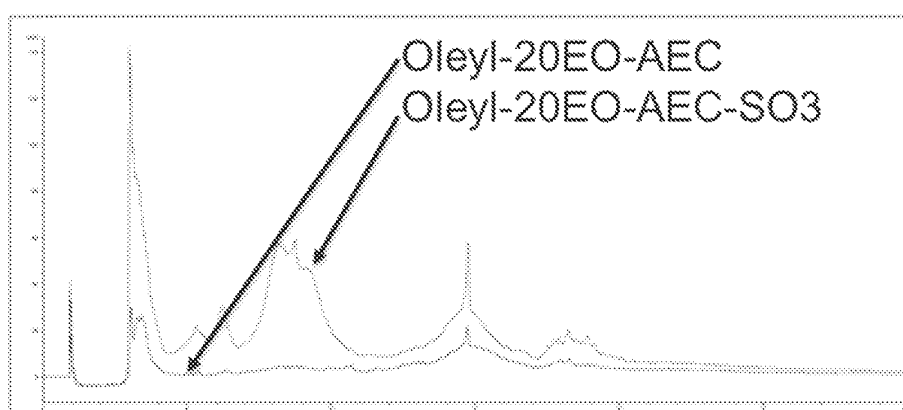


FIGURE 12

**FIGURE 13****FIGURE 14**

**FIGURE 15****FIGURE 16**

**FIGURE 17****FIGURE 18**

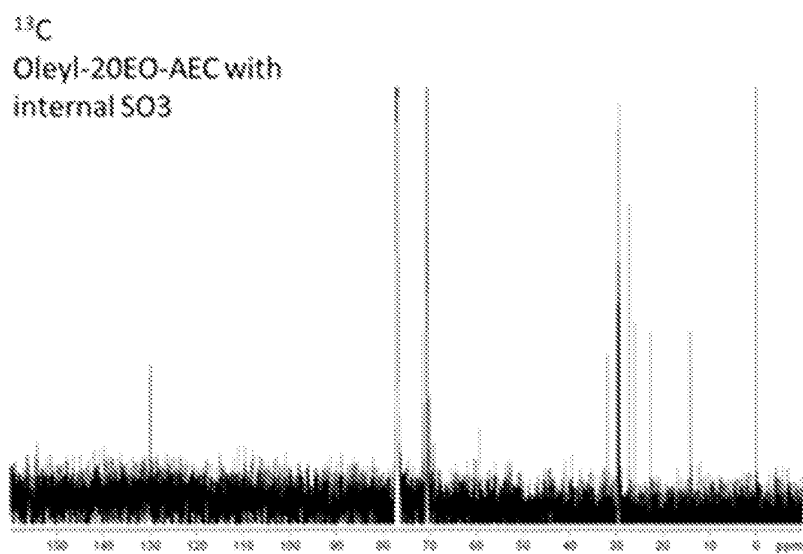


FIGURE 19

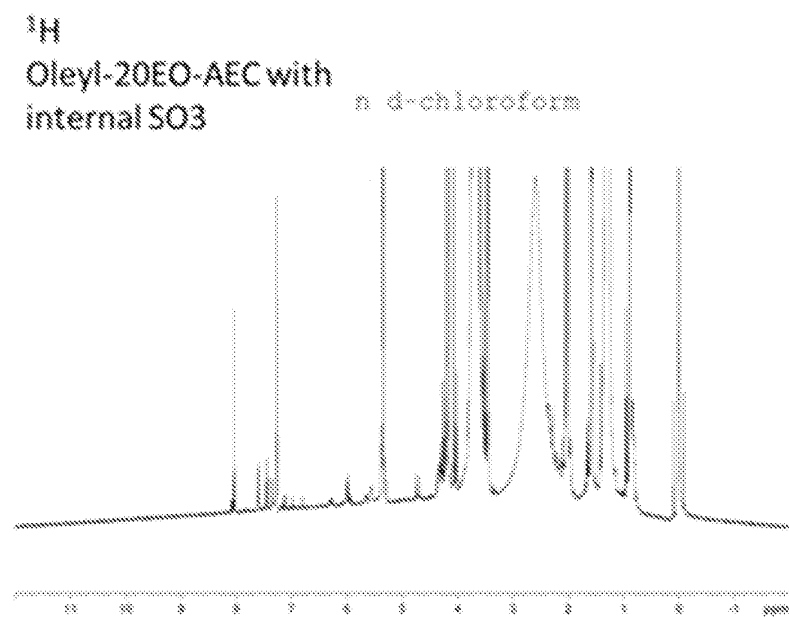


FIGURE 20