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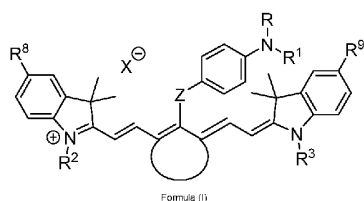
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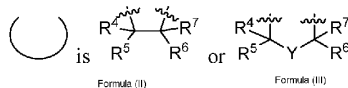
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Formula (I)



Formula (II)

Formula (III)

(57) Abstract: Disclosed are compounds with the following structure (Formula (I)) where (Formula (II)) or (Formula (III)), X is an anion (e.g., a biologically suitable anion, such as, for example, chloride, iodide, and the like). Y is NH, NR¹⁰, or CR¹¹R¹². Z is a heteroatom (e.g., O, S, or Se). R and R¹ are independently chosen from methyl, ethyl, propyl (e.g., n-propyl, isopropyl), butyl (e.g., n-butyl, isobutyl, tert-butyl), and the like, and combinations thereof. In various examples, R and R¹ are not both oxygen atoms (such that an -NO₂ is formed). R² and R³ are independently chosen from methyl, ethyl, propyl (e.g., n-propyl, isopropyl), butyl (e.g., n-butyl, isobutyl, tert-butyl), and the like, and combinations thereof. R⁴, R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, R¹¹, and R¹² are independently chosen from hydrogen, alkyl groups (e.g., methyl, ethyl, propyl (e.g., n-propyl, isopropyl), butyl (e.g., n-butyl, isobutyl, tert-butyl)), and the like, and combinations thereof. Also disclosed are compositions and methods of using the compounds and compositions. The compounds or compositions may be used to visualize or identify tumors.

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