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Steliou

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(54) **DRUG MITOCHONDRIAL TARGETING AGENTS**

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(57) **ABSTRACT**

The invention relates to novel targeting drug agents that are targeted for entry into the mitochondria. More specifically, the agents are cisplatin derivatives called mitoplatins which are useful as anti-tumor agents. Mitoplatins are named for their targeting to the mitochondrial DNA via the carnitine-acylcarnitine translocase system. The invention also relates to methods of synthesizing mitoplatins, compositions of matter containing mitoplatins and methods of using the mitoplatins.

71 Claims, 11 Drawing Sheets