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(54) Title: CHEMICAL MESSENGER SENSOR

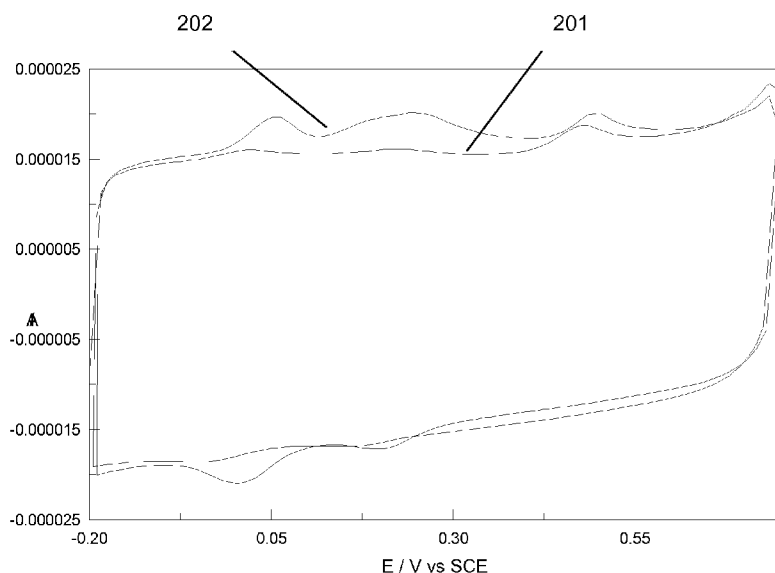


Figure 2

(57) Abstract: A sensor for the detection of chemical messengers is described herein. In particular, a sensor for the detection of serotonin is reported. Serotonin plays a pivotal role as a neurotransmitter in the modulation of a myriad of physiological responses including anger, aggression, mood, sleep, sexuality, and appetite. An electrode for detecting serotonin comprising a conducting or semi-conducting substrate, and a polymer material on said substrate is disclosed. Said polymer comprises a conducting polymer doped with a cyclodextrin macrocycle. Suitable polymer materials include polypyrroles and polythiophenes, e.g. PEDOT. Suitable cyclodextrin macrocycles include anionic cyclodextrin macrocycles, for example sulfonated β -cyclodextrins (CDs). Also disclosed is a sensor capable of selectively detecting serotonin in the presence of ascorbic acid, epinephrine, norepinephrine and dopamine.

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X	LAGROST ET AL: "Host-guest complexation: a new strategy for electrodeposition of processable polythiophene composites from aqueous medium" CHEMICAL COMMUNICATIONS - CHEMCOM, ROYAL SOCIETY OF CHEMISTRY, GB LNKD- DOI:10.1039/A707862E, no. 4, 1 January 1998 (1998-01-01), pages 489-490, XP002144876 ISSN: 1359-7345	1,2,4,5, 7-9,12, 13,15, 16, 19-21, 23,25,26
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Y	column 4, line 64 - column 5, line 54 column 7, lines 7-10,26-35 claims 1,21-23	11,18,28
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Y	WO 2006/127023 A2 (UNIV SOUTH FLORIDA [US]; YU BAZHANG [US]; MOUSSY FRANCIS [US]) 30 November 2006 (2006-11-30) page 10, lines 1-13 -----	11, 18, 28

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Information on patent family members

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