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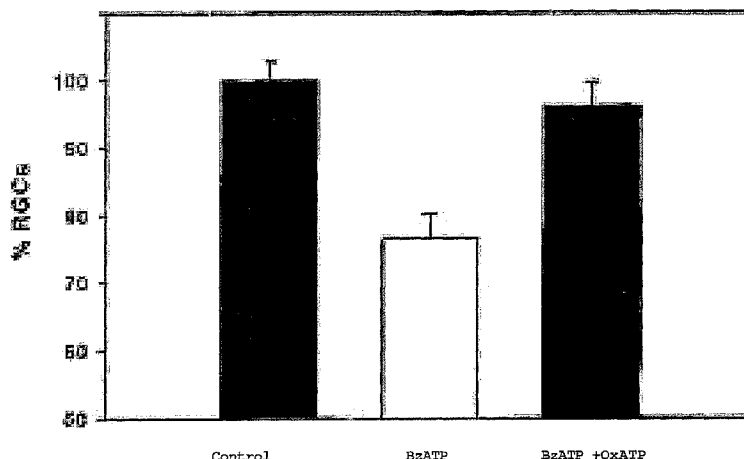
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(54) Title: NEUROPROTECTION OF RETINAL GANGLION CELLS



(57) Abstract: This invention relates to the neuroprotection of the optic nerve and the treatment of glaucoma, more specifically, the invention is directed to a method of preventing, inhibiting, decreasing incidence and suppressing death in ganglion cells by manipulating the P2X<sub>7</sub> and A<sub>3</sub> receptors on ganglion cells, by reducing levels of ATP released into the extracellular space of the retina and enhancing the conversion of released extracellular ATP into adenosine.

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## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US 06/24063

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(8): A61K 39/395 (2007.01)

USPC: 424/143.1

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

USPC: 424/143.1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

USPC: 514/47, 150, 89, 253.05, 255.06, 553, 566

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WEST, MEDLINE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages                                                                                     | Relevant to claim No. |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| Y         | SUGIYAMA et al. Regulation of P2X7-Induced pore formation and cell death in pericyte-containing retinal microvessels. Am J Physiol Cell Physiol, 2004, Vol 288:568-576 | 1-40                  |
| Y         | US 2003/0082183 A1 (WHEELER et al.) 01 May 2003 (01.05.2003), para [0022], [0055]                                                                                      | 1-33                  |
| Y         | DUAN et al. P2X7 Receptor-Mediated Release of Excitatory Amino Acids from Astrocytes. The Journal of Neuroscience, 2003, 23(4): 1320-1328                              | 37-40                 |
| Y         | US 2003/0087247 A1 (KUMAMOTO et al.) 08 May 2003 (08.05.2003), para [0010], [0071] and [0110]                                                                          | 34-36                 |
| Y         | BUELL et al. Blockade of Human P2X7 Receptor Function with a Monoclonal Antibody. Blood, 1998, Vol 42:10, p 3521-3528                                                  | 14, 25                |

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