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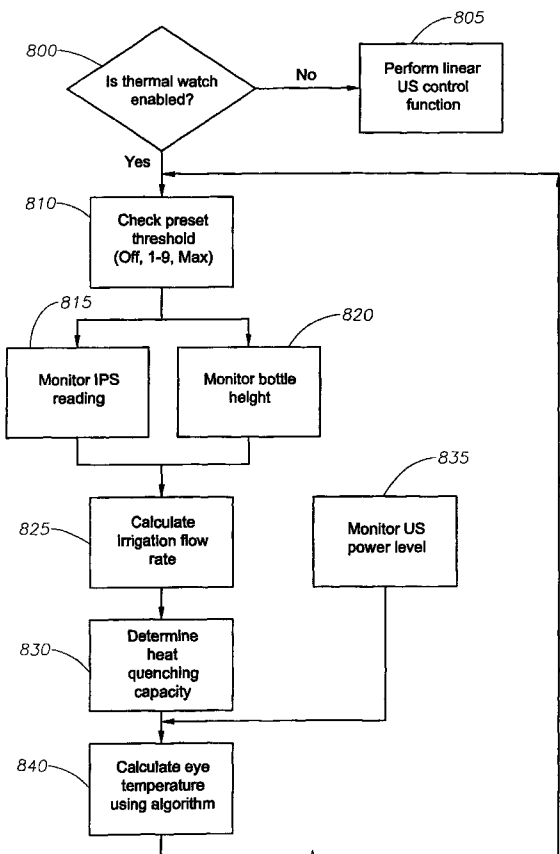
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(54) Title: METHOD OF CONTROLLING A SURGICAL SYSTEM BASED ON A LOAD ON THE CUTTING TIP OF A HANDPIECE



(57) Abstract: A surgical system that is able to sense the onset of an occlusion or other surgical event as well as the instant an occlusion breaks. To help avoid overheating of the tip, the system determines an approximate temperature of the eye using an irrigation flow rate and reduces the power to the handpiece automatically if an overheating situation is predicted. Alternatively or in addition, the system monitors the power drawn by the handpiece, which is indicative of the cutting load on the tip, and automatically adjusts the power or stroke of the tip to compensate for increased loads on the tip.

WO 2005/092023 A3



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# INTERNATIONAL SEARCH REPORT

International application No.

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**A. CLASSIFICATION OF SUBJECT MATTER**  
**IPC:** A61B 17/20(2006.01)  
  
**USPC:** 6094/22  
 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)  
 U.S. : 6094/22  
  
 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
  
 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6179805 B1 (Sussman et al.) 30 January 2001, entire patent.	1-80
A	US 6077285 A (Boukhny) 20 June 2000, entire patent.	1-80

Further documents are listed in the continuation of Box C.       See patent family annex.

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"O"	document referring to an oral disclosure, use, exhibition or other means	
"P"	document published prior to the international filing date but later than the priority date claimed	"&" document member of the same patent family

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