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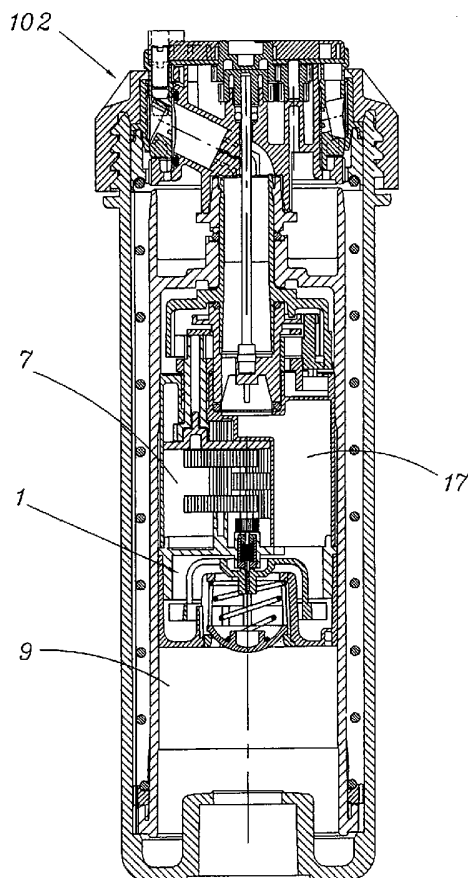
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(54) Title: SPEED LIMITING FOR ROTARY DRIVEN SPRINKLER



(57) Abstract: A speed limiting mechanisms for turbine-driven fluid distribution apparatus usable with compressible fluid such as compressed air and incompressible fluid such as water. Dynamic viscous damping of the turbine output power train is used to control the rotational speed of the turbine. This prevents overspeeding when the turbine is air driven, and also when the turbine is water driven, under abnormal conditions such as blockage of a bypass area designed to control the turbine speed by limiting flow to the turbine. The same mechanism can be used to impose a lower rotational speed in the turbine during normal operation in conjunction with a turbine optimized for lower speed operation to reduce the required gear reduction in the power train.

WO 2004/071169 A3



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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/03634

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : B05B 15/10  
 US CL : 239/205, 206, 240, 252

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. : 239/205, 206, 240, 252, 251, 263

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.
X	US 4,932,590 A (HUNTER) 12 JUNE 1990 (12.06.1990), See the entire document.	1, 15
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A		2-14, 16-24
A	US 5,927,607 A (SCOTT) 27 JULY 1999 (27.07.1999), See the entire document.	1-24

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

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"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
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