IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD

PRIME WIRE & CABLE, INC.)
Petitioner,)
)
v.) Case: IPR2018-01592
) Patent No.: 9,320,122
CANTIGNY LIGHTING)
CONTROL, LLC.	EXHIBIT 1045
,)
Patent owner)
)
JASCO PRODUCTS, INC.)
,)
Licongoo	Ì





US007058479B2

(12) United States Patent Miller

(10) Patent No.: US 7,058,479 B2 (45) Date of Patent: Jun. 6, 2006

(54) IRRIGATION CONTROLLER

(76) Inventor: Robert Miller, 4955 Coolbrook Ave,

Montreal, Quebec (CA) H3X 2K8

(*) Notice: Subject to any disclaimer, the term of this

patent is extended or adjusted under 35

U.S.C. 154(b) by 0 days.

(21) Appl. No.: 11/044,230

(22) Filed: Jan. 28, 2005

(65) Prior Publication Data

US 2005/0171646 A1 Aug. 4, 2005

Related U.S. Application Data

- (60) Provisional application No. 60/539,975, filed on Jan. 30, 2004.
- (51) **Int. Cl.**

G05D 7/**00** (2006.01)

- (52) **U.S. Cl.** 700/284; 239/69

See application file for complete search history.

(56) References Cited

U.S. PATENT DOCUMENTS

4,189,776 A	2/1980	Kendall
4,807,664 A	2/1989	Wilson et al.
4,827,155 A	5/1989	Firebaugh
4,937,746 A	6/1990	Brundisini
5,048,755 A	9/1991	Dodds
5,262,936 A	11/1993	Faris et al.
5,272,620 A	12/1993	Mock et al.
5,333,785 A	8/1994	Dodds et al.
5,444,611 A	8/1995	Woytowitz et al.
5,479,339 A	12/1995	Miller
5,568,376 A	10/1996	Benmergui
5,602,728 A	2/1997	Madden et al.
5,748,466 A	5/1998	McGivern
5,956,248 A	9/1999	Williams

6,298,285	B1 *	10/2001	Addink et al 70	0/284
6,314,340	B1 *	11/2001	Mecham et al 70	0/284
6,459,959	B1	10/2002	Williams	
6,647,319	B1	11/2003	Goldberg	
6,694,223	B1	2/2004	Goldberg	
6,721,630	B1	4/2004	Woytowitz	
6,766,221	B1 *	7/2004	Christiansen 70	0/284
6,772,050	B1	8/2004	Williams	
2002/0002425	A1*	1/2002	Dossey et al 70	0/284
2004/0086053	A1	5/2004	Anderson et al.	
2004/0225412	A1*	11/2004	Alexanian 70	0/284
2004/0236443	A1	11/2004	Ware et al.	
2005/0137752	A1*	6/2005	Alvarez 70	0/284
2005/0267641	A1*	12/2005	Nickerson et al 70	0/284

FOREIGN PATENT DOCUMENTS

WO WO 2004/046872 6/2004

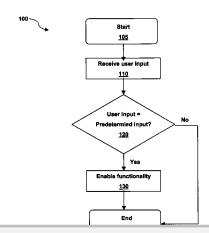
* cited by examiner

Primary Examiner—Leo Picard
Assistant Examiner—Charles Kasenge

(57) ABSTRACT

An irrigation controller for selectively turning on and off a set of sprinkler valve stations. The irrigation controller is programmable by a user. The irrigation controller includes an irrigation control processor. The irrigation control processor includes an input port, an output port, a memory element for storing an irrigation control program and irrigation control parameters, the irrigation control program implementing a plurality of functionalities that are selectively enabled, a processing unit for executing the irrigation control program, and a bus connecting said processing unit to said memory element and to said input and output ports. An input device is interfaced with the input port. The output port is provided with interface with the sprinkler valve stations for controlling the turning on and off of the sprinkler valve stations. The input device cooperates with the control program to enable at least one specific functionality from the functionalities in response to a predetermined input being received from the user through the input device.

22 Claims, 8 Drawing Sheets





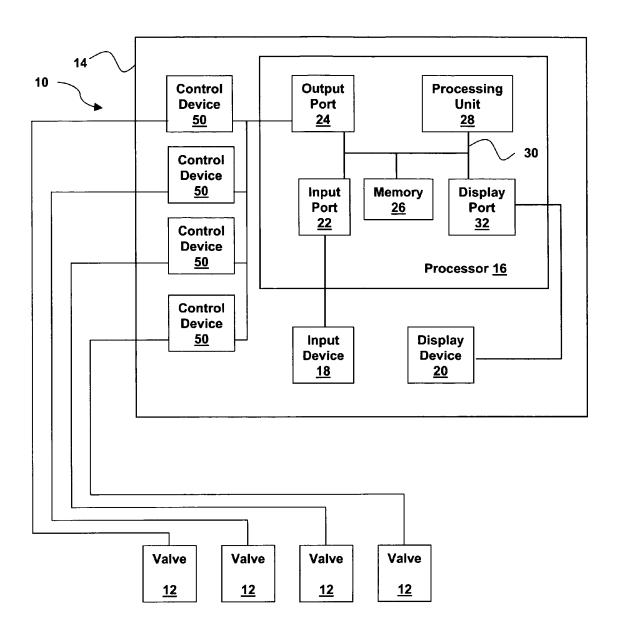
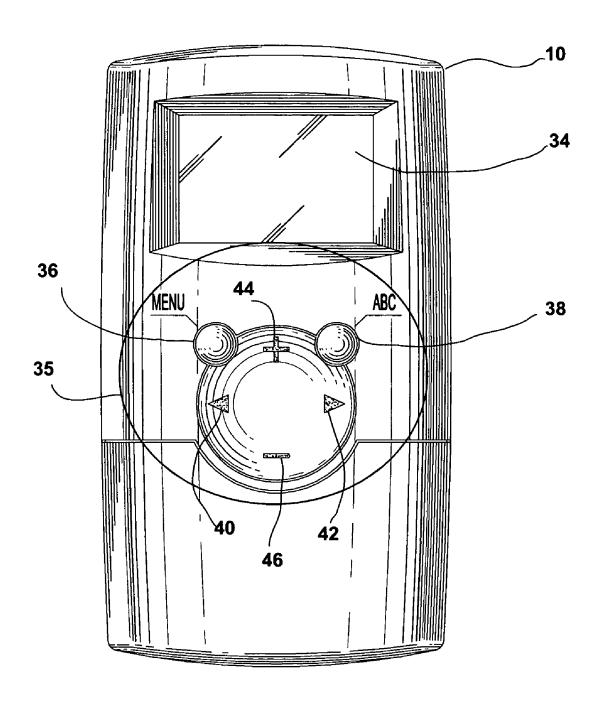


FIGURE 1







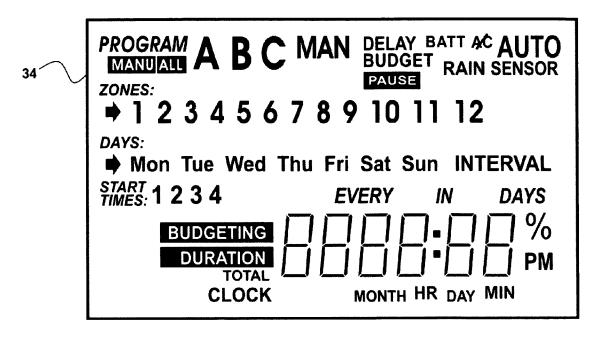


FIGURE 3a



FIGURE 3b



DOCKET A L A R M

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

