US005584564A

United States Patent [19]

[11] **Patent Number:**

5,584,564

[45] **Date of Patent:** Dec. 17, 1996

[54]	BATTERY OPERATED LIGHTING	ľ
	APPARATUS	

[76] Inventor: Charles E. Phyle, 6280 Brandywine,

Holly, Mich. 48442

[21] Appl. No.: 552,086

Phyle

[22] Filed: Nov. 2, 1995

[51] Int. Cl.⁶ A45B 3/02 362/431; 135/910

362/184, 190, 191, 431, 234; 135/910,

[56] References Cited

U.S. PATENT DOCUMENTS

2,087,537 2,453,925 3,036,206 3,227,867 3,313,929 3,506,232 3,723,723	7/1937 11/1948 5/1962 1/1966 4/1967 4/1970 3/1973	Smithing 135/910 Finkel 362/102 Mendonca . Holbrook . Baker 362/102 Schiavone 362/102 Wolar et al. 248/320 Lerner 362/123
3,723,723 3,870,062		Medlin

4,079,344	3/1978	Lauben et al	335/2				
4,174,532	11/1979	Kelley	362/102				
4,848,385		Pennella					
4,860,179	8/1989	Mui et al	362/102				
5,053,931	10/1991	Rushing					
5,126,922	6/1992	Andreasen	362/32				
5,148,849	9/1992	Faludy	160/67				
5,323,798	6/1994	Yang	135/16				
OTHER PUBLICATIONS							

Home Decorators Collection Magazine, Winter 1995 Edi-

tion, p. 53.

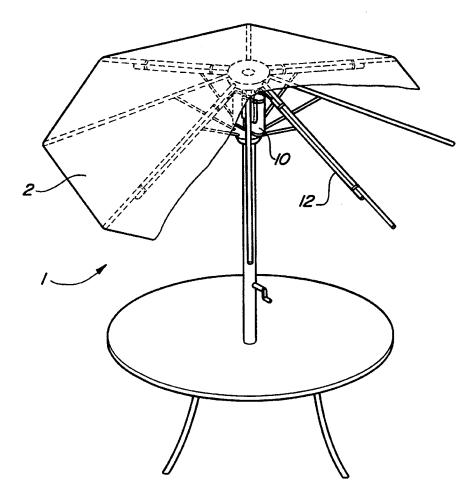
Primary Examiner-Stephen F. Husar

Attorney, Agent, or Firm-Harness, Dickey & Pierce, P.L.C.

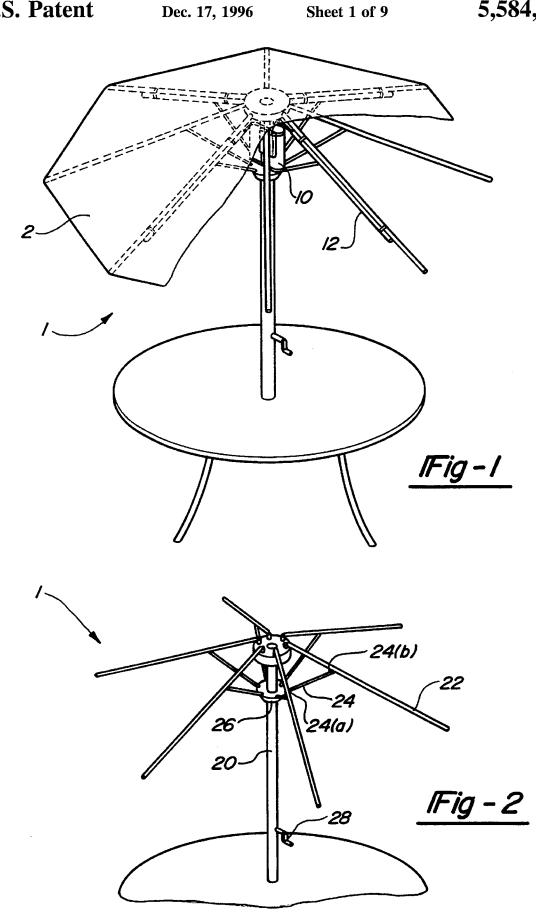
ABSTRACT

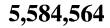
A battery operated lighting apparatus is provided particularly well suited for use in outdoor structures such as patio table umbrellas, dining canopies and tents. A housing containing a battery operated power source and an on/off switch is electrically connected to a lighting device for providing illumination to an outdoor structure. The present invention enables attachment of the housing to a support pole and attaching the lighting device to a member of an outdoor structure whereby battery powered illumination can be provided thereto.

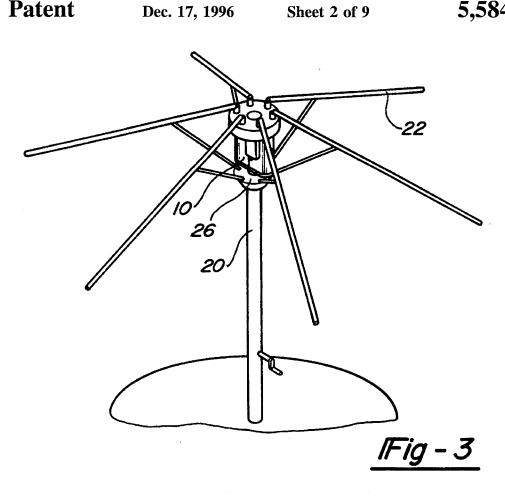
30 Claims, 9 Drawing Sheets

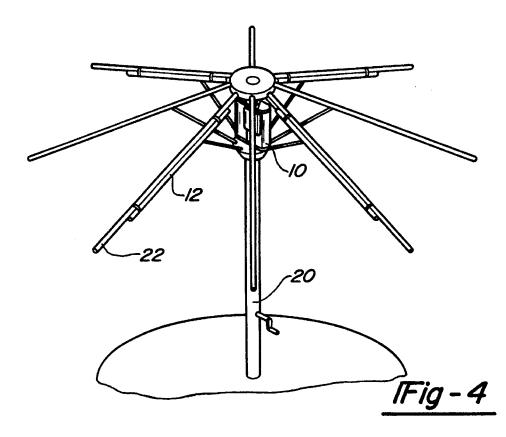


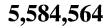


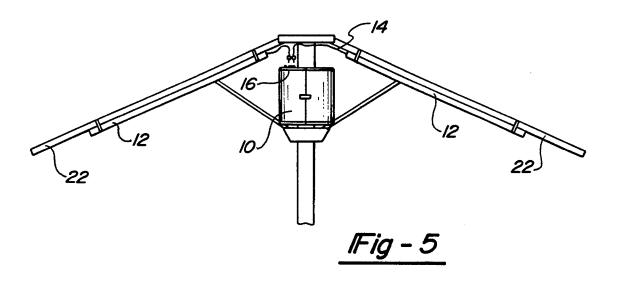


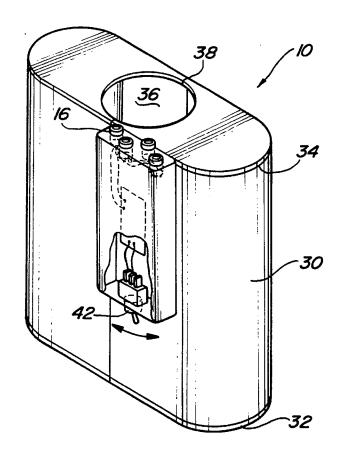




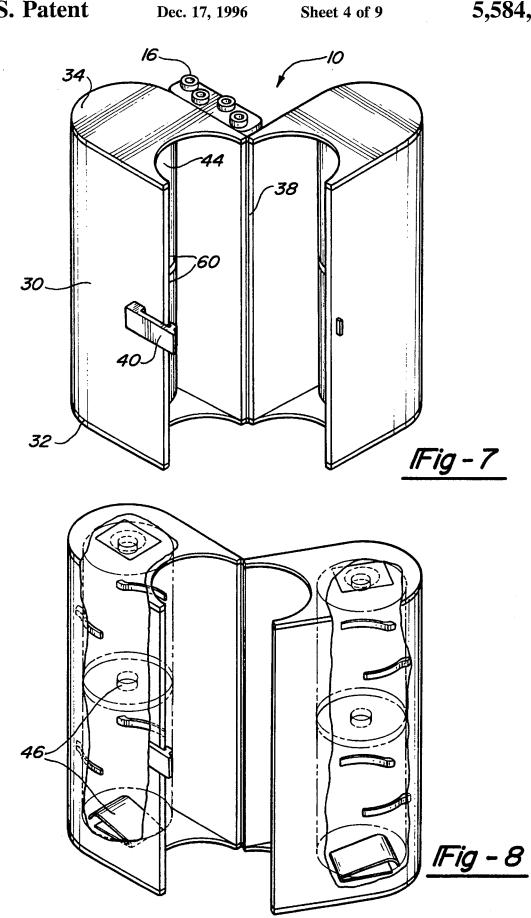








lFig-6



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.

