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United States Patent [19]

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Tuttle et al.

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[54] **BUTTON-TYPE BATTERY HAVING BENDABLE CONSTRUCTION, AND ANGLED BUTTON-TYPE BATTERY**

3,935,026	1/1976	Howard	136/20
4,048,405	9/1977	Megahed	429/206
4,121,020	10/1978	Epstein et al.	429/174
4,122,241	10/1978	Ciliberti, Jr. et al.	429/133
4,263,380	4/1981	Riedl	429/162
4,374,909	2/1983	Tucholski	429/174
4,501,805	2/1985	Yasuda et al.	429/174
4,632,887	12/1986	Jung	429/181
5,326,652	7/1994	Lake	429/127

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[73] Assignee: **Micron Communications, Inc.,** Boise, Id.

[21] Appl. No.: **205,957**

FOREIGN PATENT DOCUMENTS

[22] Filed: **Mar. 2, 1994**

1099018	11/1959	Germany	10/1
2201811	1/1972	Germany	21/84

[51] Int. Cl.⁶ **H01M 2/02**

[52] U.S. Cl. **429/127; 429/174**

[58] Field of Search **429/127, 174, 175, 176**

Primary Examiner—Stephen Kalafut
Attorney, Agent, or Firm—Wells, St. John, Roberts, Gregory & Matkin

[56] References Cited

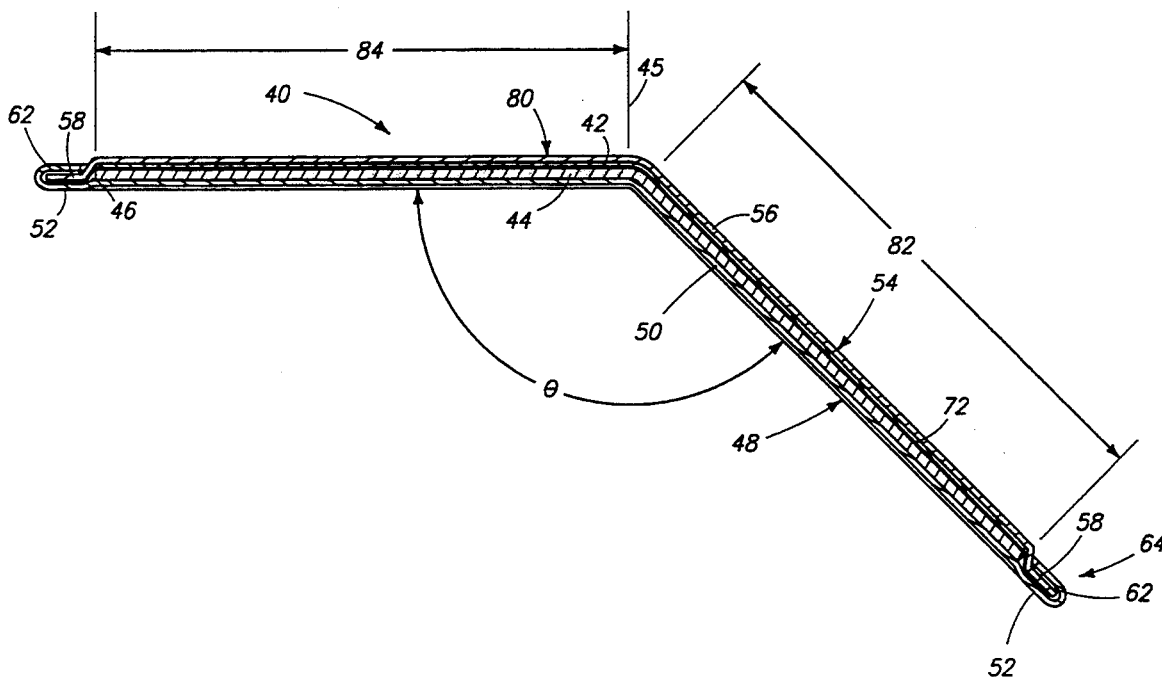
U.S. PATENT DOCUMENTS

2,422,045	6/1947	Ruben	136/167
2,712,565	7/1955	Williams, Jr.	136/107
2,951,891	9/1960	Kempf	136/169
3,023,259	2/1962	Color et al.	429/127
3,096,217	7/1963	Clune	136/107
3,185,595	5/1965	Schenk, Jr.	136/133
3,440,110	4/1969	Arbter	136/166
3,457,117	7/1969	Angelovich	136/133
3,663,000	6/1972	Ruetschi	136/107
3,708,343	1/1973	Walsh	136/133
3,713,896	1/1973	Feldhake	136/133
3,799,959	3/1974	Epstein	260/429
3,891,462	6/1975	Langkau	136/111

[57] ABSTRACT

A button-type battery has an anode, a cathode, a separator, and an electrolyte encased within a housing and surrounding by a fluid-tight peripheral seal. The battery is capable of being deflected such that a first portion of the battery is angled relative to a second portion through an internal angle between the first and second portions in a range from 175° to at least 90° without destroying operation of the button-type battery or rupturing the fluid-tight peripheral seal.

21 Claims, 5 Drawing Sheets



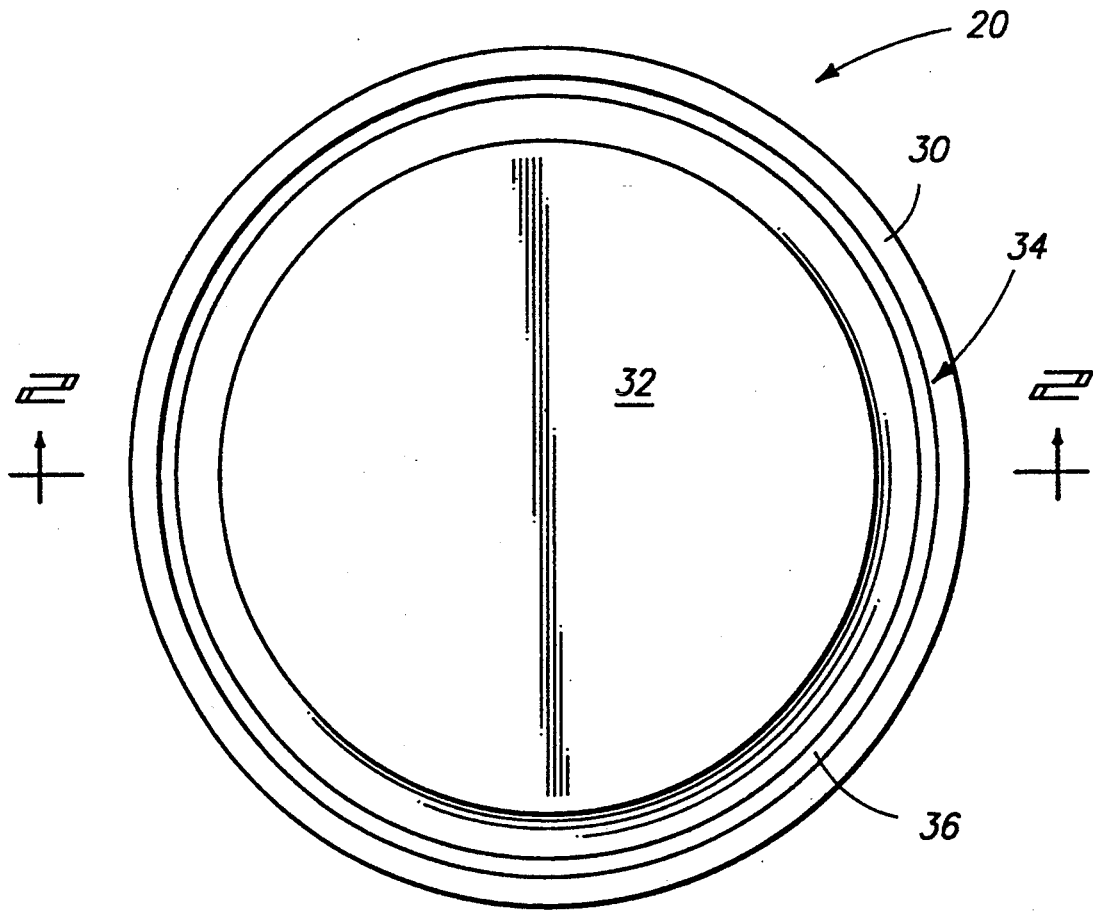
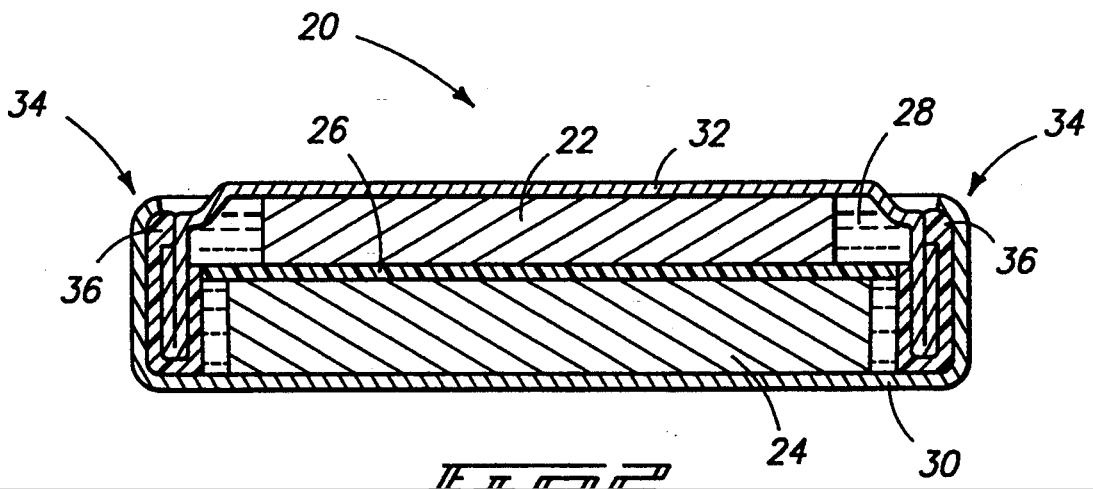


FIG. 1
PRIOR ART



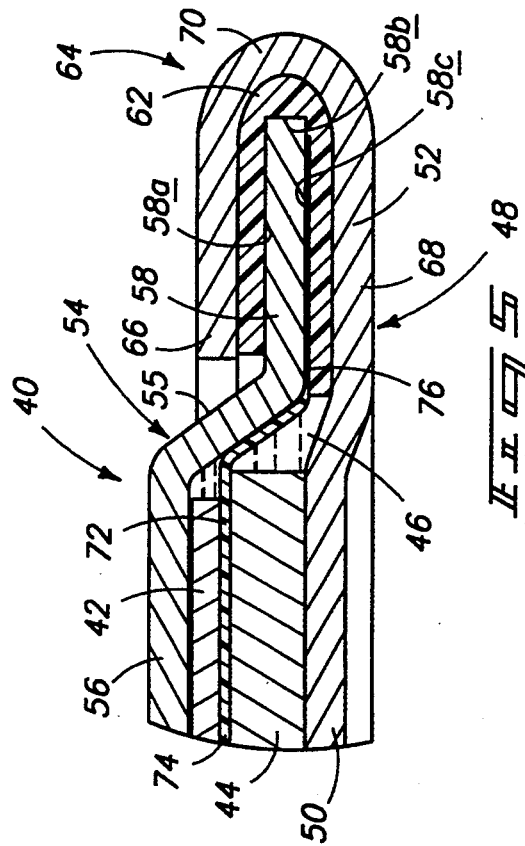
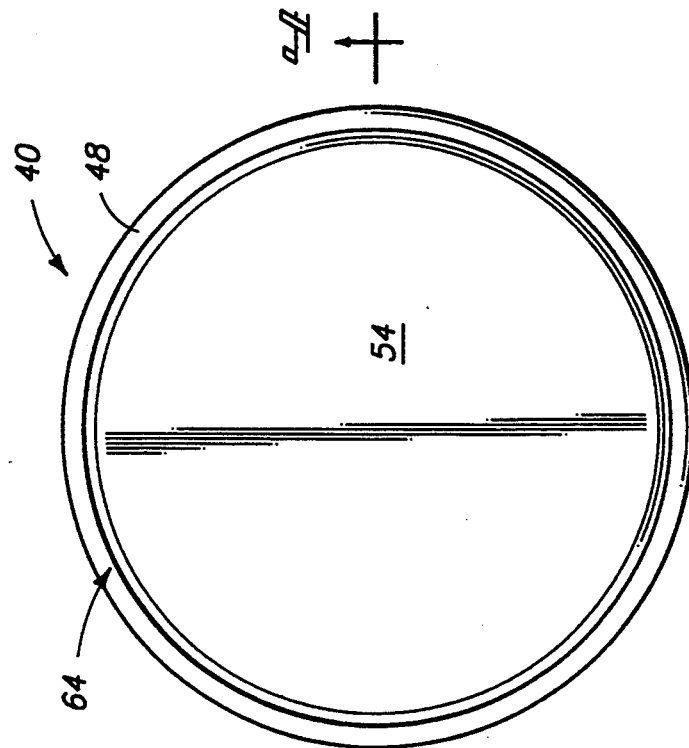
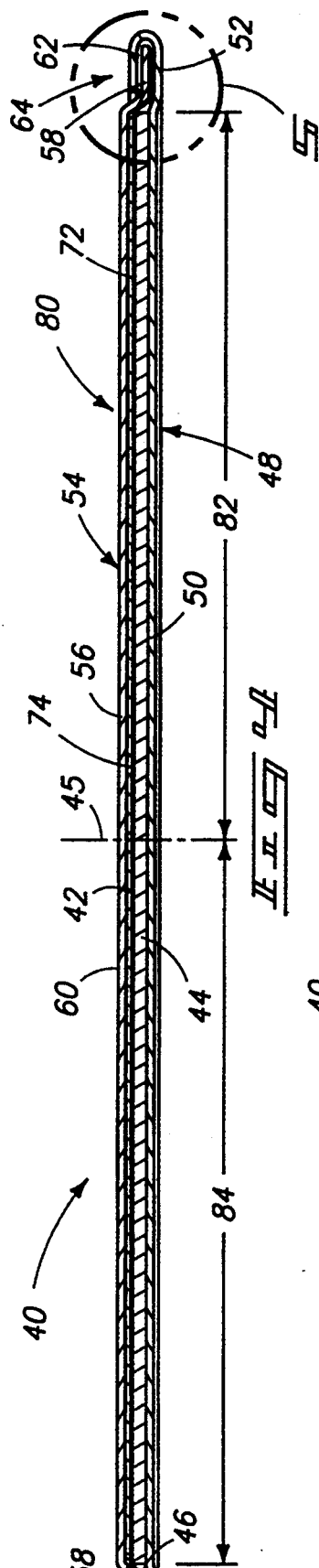


FIG. 2

FIG. 3

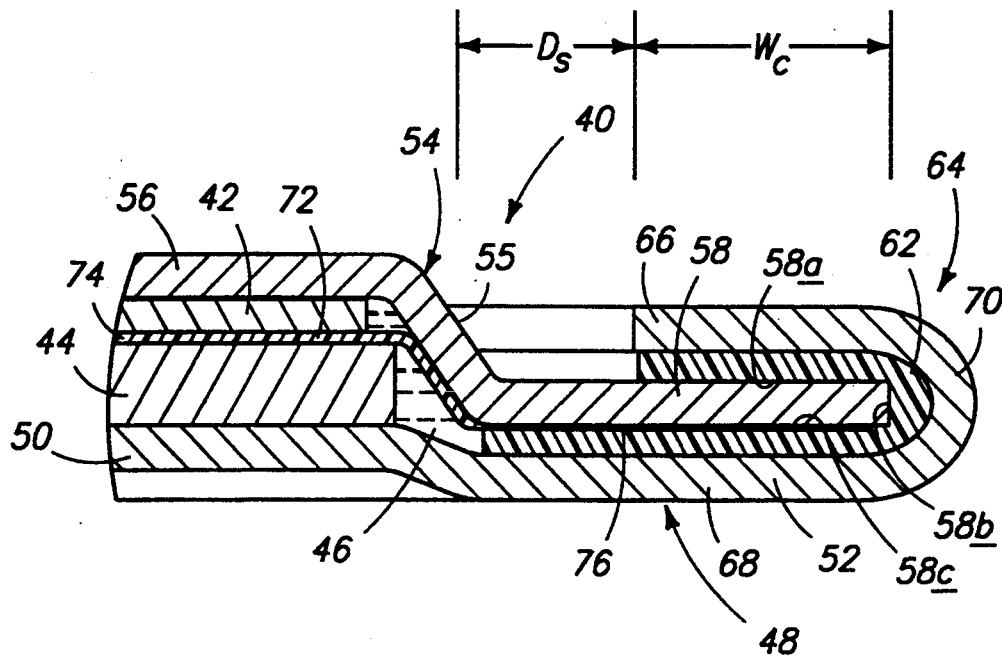
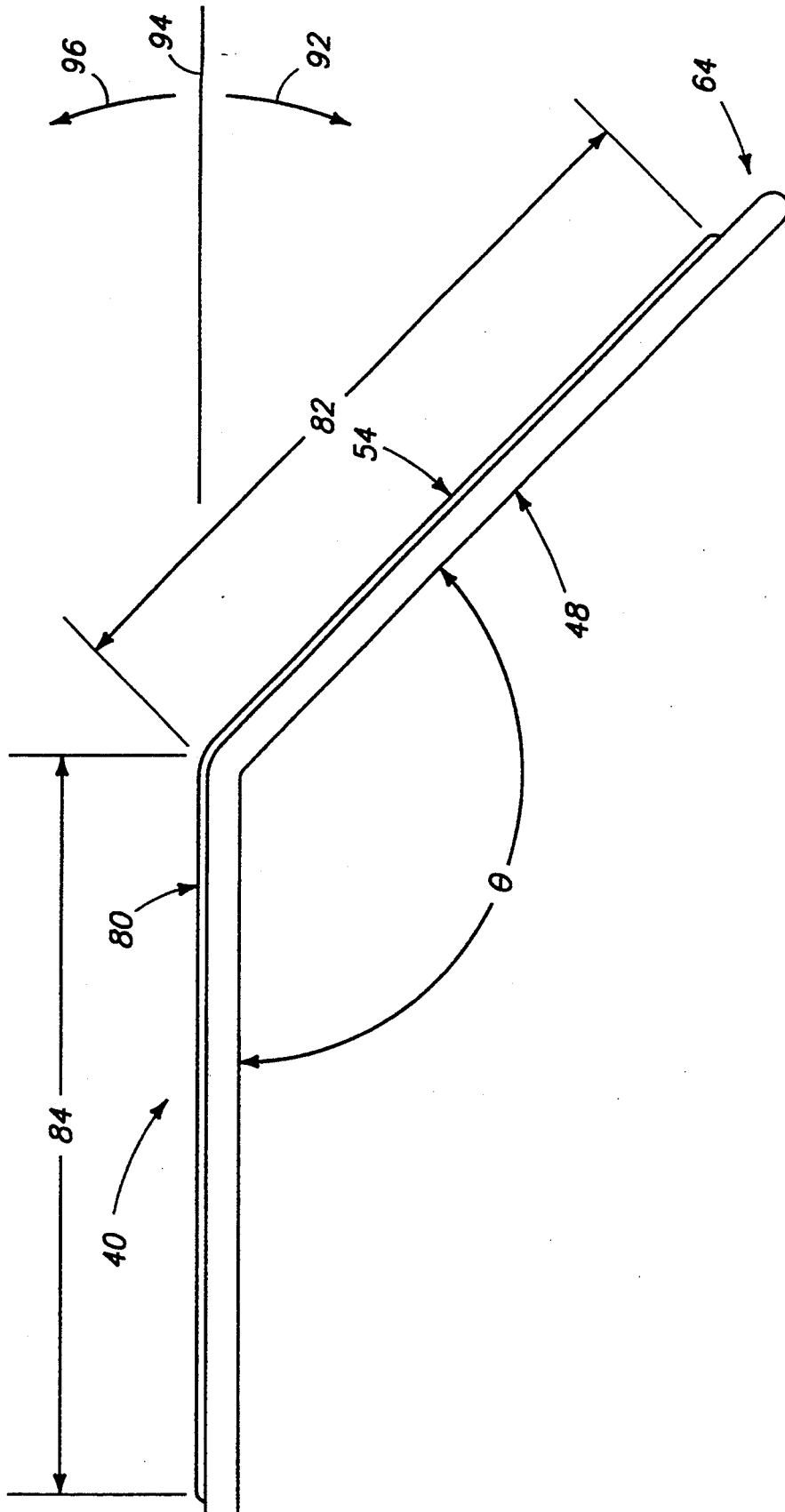


FIG. 16



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