



US00D420095S

# United States Patent [19]

[11] Patent Number: **Des. 420,095**

Miller et al.

[45] Date of Patent: **\*\* \*Feb. 1, 2000**

[54] **CYLINDRICAL FILTER ELEMENT**

[75] Inventors: **John D. Miller**, Ithaca; **Kenneth M. Williamson**, Jamesville, both of N.Y.

[73] Assignee: **Pall Corporation**, East Hills, N.Y.

[\*] Notice: This patent is subject to a terminal disclaimer.

[\*\*] Term: **14 Years**

[21] Appl. No.: **29/096,709**

[22] Filed: **Nov. 18, 1998**

### Related U.S. Application Data

[62] Division of application No. 29/060,231, Sep. 25, 1996, Pat. No. Des. 404,796, which is a continuation of application No. 29/031,229, Nov. 14, 1994, abandoned, which is a continuation of application No. 29/024,481, Jun. 13, 1994, abandoned, which is a continuation of application No. 07/682,452, Apr. 9, 1991, Pat. No. Des. 349,567.

[51] **LOC (7) Cl.** ..... **23-01**

[52] **U.S. Cl.** ..... **D23/209**

[58] **Field of Search** ..... D23/200, 207, D23/209, 365; 240/263-264, 460, 497.01, 497.1

### [56] References Cited

#### U.S. PATENT DOCUMENTS

- D. 349,567 8/1994 Miller et al. .
- D. 403,741 1/1999 Rao et al. .... D23/209
- 629,377 7/1899 Leland ..... 210/448

- 2,426,405 8/1947 McDermott ..... D23/209
- 2,539,450 1/1951 Magill .
- 3,241,680 3/1966 Humbert, Jr. .
- 3,442,392 5/1969 Skelley .
- 3,566,607 3/1971 Sixt ..... 210/459
- 4,154,688 5/1979 Pall .
- 4,402,830 9/1983 Pall .
- 4,882,056 11/1989 Degen et al. .
- 4,902,417 2/1990 Lien .
- 5,039,413 8/1991 Harwood et al. .
- 5,252,207 10/1993 Miller et al. .
- 5,290,457 3/1994 Karbachsch et al. .... 210/264
- 5,543,047 8/1996 Stoyell et al. .

### FOREIGN PATENT DOCUMENTS

- 855068 12/1955 United Kingdom .
- 1005987 9/1963 United Kingdom .
- 1337170 12/1971 United Kingdom .

### OTHER PUBLICATIONS

“Ultipor Composite Filter Structure”, Pall Corporation, 1992.

*Primary Examiner*—Robin V. Taylor  
*Attorney, Agent, or Firm*—Leydig, Voit & Mayer, Ltd.

### [57] CLAIM

The ornamental design for a cylindrical filter element, as shown and described.

### DESCRIPTION

The FIGURE shown is a front view of a cylindrical filter element showing an embodiment of our new design, the other sides being identical.

**1 Claim, 1 Drawing Sheet**



