FULL FACE RESPIRATOR

Inventors: Joseph G. Reischel, St. Paul; David P. Knivsland, North St. Paul; Gerald M. Brostrom, Burnsville, all of Minn.; David C. Byram, River Falls, Wis.; Vaughn B. Graunis, Inver Grove Heights, Minn.

Assignee: Minnesota Mining and Manufacturing Company, St. Paul, Minn.

Term: 14 Years

Filed: Oct. 27, 1995

U.S. Cl. ........................................ D24/110.2; D24/110.1

Field of Search .................................. D24/110.2, 110.3, D24/110.4, 110.5; 128/206.12, 206.15, 206.17, 206.23, 206.21, 201.24, 206.19; D29/124

References Cited

U.S. PATENT DOCUMENTS
D. 336,546 6/1993 Lymbard .................................... D24/110.2
3,545,436 12/1970 Holloway ........................... 128/141
3,602,219 8/1971 Warche ............................... 128/146.5
4,057,057 11/1977 Backlund .......................... 128/124.4
4,069,516 1/1978 Watkins, Jr. .................. 2/428
4,167,185 9/1979 Lewis .......................... 128/146.7
4,373,520 2/1983 Arlhague .......................... 128/201.19
4,402,316 9/1983 Gaddbery .......................... 128/201.15
4,414,973 11/1983 Matheson et al. ........... 128/206.15

FOREIGN PATENT DOCUMENTS
2268076 1/1994 United Kingdom
WO92/19322 11/1992 WIPO
WO93/14819 8/1993 WIPO

OTHER PUBLICATIONS

The Lab Safety Supply Catalog "Respirators" pp. 130, 112, 110 @1994 Ex Room.
ISI Facemask product literature (Prior Art).
(List continued on next page.)

Primary Examiner—Louis S. Zarfas
Assistant Examiner—I. Simmons
Attorney, Agent, or Firm—Gary L. Griswold; Walter N. Kirn, Karl G. Hanson

CLAIM

The ornamental design for a full face respirator, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a full face respirator showing a first embodiment of the new design;
FIG. 2 is a front elevational view of the full face respirator of FIG. 1;
FIG. 3 is a left side elevational view of the full face respirator of FIG. 1. The right side is a mirror image of the left side;
FIG. 4 is a rear elevational view of the full face respirator of FIG. 1;
FIG. 5 is a bottom elevational view of the full face respirator of FIG. 1;
FIG. 6 is a top elevational view of the full face respirator of FIG. 1;
FIG. 7 is a perspective view of a full face respirator showing a second embodiment of the new design;
FIG. 8 is a front elevational view of the full face respirator of FIG. 7;
FIG. 9 is a left side elevational view of the full face respirator of FIG. 7. The right side is a mirror image of the left side;
FIG. 10 is a rear elevational view of the full face respirator of FIG. 7;
FIG. 11 is a bottom elevational view of the full face respirator of FIG. 7 and;
FIG. 12 is a top elevational view of the full face respirator of FIG. 7.

1 Claim, 10 Drawing Sheets
U.S. PATENT DOCUMENTS

4,595,003 6/1986 Shoemaker et al. ........... 128/206.17 X
4,739,755 4/1988 White et al. ................... D24/110.2 X
4,881,538 11/1989 Angell .................................. 128/201.15
5,080,092 1/1992 Tenna .................................. 128/201.19

OTHER PUBLICATIONS

Neoterik advertisement for the Technirama respirator (Prior Art).
MSA Constant Flow or Pressure Demand Duo-Flo™ and Duo-Twin™ Respirator product literature (1988).
Dräger Atemkomfort mit DrägerSchutz Panorama BelAir M product literature (Prior Art).
Scott Health & Safety Full-Line Catalog product literature (May 1989).
MSA Ultra Elite™ Facepiece product literature dated (1994).
Fernez Cosmo The Innovative Mask product literature (Prior Art).
Cairns & Brother Cairns IRIS™ product literature (Prior Art).
Sekura Sfera™ product literature (Prior Art).
SGE 600 product literature.
Dräger Atemkomfort mit DrägerSchutz: Panorama BelAir product literature (6 pages) 91.
Bilsom Group Eye, Face, Respiratory and Hearing Protection product literature (Prior Art).