

Title (en)
Filtering face respirator having grasping feature indicator

Title (de)
Filtermaske mit Anzeiger von Erfassungsmittel

Title (fr)
Masque filtrant disposant d'un indicateur de moyens de saisie

Publication
EP 2298096 A2 20110323 (EN)

Application
EP 10177484 A 20100917

Priority
US 56227309 A 20090918

Abstract (en)
A filtering, face-piece respirator 10 that has a harness 14, a mask body 12, and first and second flanges 30a, 30b. The mask body 12 comprises a filtering structure 16 and has a grasping feature such as first and second flanges 30a, 30b disposed on first and second mask body sides. First and second indicia 32a, 32b is placed on the first and second flanges 30a, 30b, respectively. The provision of indicia on a grasping feature of a respirator mask body is beneficial for informing the wearer of where to grasp the mask body for donning, doffing, and adjustment.

IPC 8 full level
A41D 13/11 (2006.01)

CPC (source: EP)
A41D 13/1115 (2013.01); **A41D 2400/44** (2013.01); **A62B 23/025** (2013.01)

Citation (applicant)

- US RE39493 E 20070227 - YUSCHAK GREGORY [US], et al
- US 4098270 A 19780704 - DOLBY JOHN T
- US 4790306 A 19881213 - BRAUN DAVID L [US], et al
- US 7131442 B1 20061107 - KRONZER JOSEPH P [US], et al
- US 6923182 B2 20050802 - ANGADJIVAND SEYED ABOLHASSAN [US], et al
- US 6041782 A 20000328 - ANGADJIVAND SEYED ABOLHASSAN [US], et al
- US 4850347 A 19890725 - SKOV MARTIN R [DE]
- US 4807619 A 19890228 - DYRUD JAMES F [US], et al
- US 4536440 A 19850820 - BERG HARVEY J [US]
- US D285374 S 19860826 - HUBER OTTO L, et al
- US 6568392 B1 20030527 - BOSTOCK GRAHAM J [GB], et al
- US 6484722 B2 20021126 - BOSTOCK GRAHAM J [GB], et al
- US 6394090 B1 20020528 - CHEN DANIEL T [US], et al
- US 6948499 B2 20050927 - GRIESBACH III HENRY L [US], et al
- US 6945249 B2 20050920 - GRIESBACH III HENRY L [US], et al
- US 33808408 A 20081218
- US 5617849 A 19970408 - SPRINGETT JAMES E [US], et al
- US 4600002 A 19860715 - MARYYANEK RICHARD D [US], et al
- CA 1296487 C 19920303 - MINNESOTA MINING & MFG [US]
- US 33809108 A 20081218
- US 6334671 B1 20020101 - UMEHARA SHIGERU [JP]
- US 3971373 A 19760727 - BRAUN DAVID L
- US 6391429 B1 20020521 - SENKUS RAYMOND [US], et al
- US 5804295 A 19980908 - BRAUN DAVID L [US], et al
- US 5656368 A 19970812 - BRAUN DAVID L [US], et al
- US 4215682 A 19800805 - DAVIS CHARLES I [US], et al
- US RE31285 E 19830621
- US 6824718 B2 20041130 - EITZMAN PHILIP D [US], et al
- US 6783574 B1 20040831 - ANGADJIVAND SEYED A [GB], et al
- US 6743464 B1 20040601 - INSLEY THOMAS I [US], et al
- US 6454986 B1 20020924 - EITZMAN PHILIP D [US], et al
- US 6406657 B1 20020618 - EITZMAN PHILIP D [US], et al
- US 6375886 B1 20020423 - ANGADJIVAND SEYED A [US], et al
- US 5496507 A 19960305 - ANGADJIVAND SEYED A [US], et al
- US 4588537 A 19860513 - KLAASE PETRUS T A [NL], et al
- US 4798850 A 19890117 - BROWN RICHARD C [GB]
- US 5908598 A 19990601 - ROUSSEAU ALAN D [US], et al
- US 6398847 B1 20020604 - JONES MARVIN E [US], et al
- US 6397458 B1 20020604 - JONES MARVIN E [US], et al
- US 6409806 B1 20020625 - JONES MARVIN E [US], et al
- US 6041782 A 20000328 - ANGADJIVAND SEYED ABOLHASSAN [US], et al
- US 6123077 A 20000926 - BOSTOCK GRAHAM J [GB], et al
- WO 9628216 A1 19960919 - MINNESOTA MINING & MFG [US], et al
- US 6332465 B1 20011225 - XUE JIANXIAN [US], et al
- US 6062221 A 20000516 - BROSTROM GERALD M [US], et al
- US 5237986 A 19930824 - SEPPALA HAROLD J [US], et al
- EP 1495785 A1 20050112 - CHIEN CHENG-YUAN [TW]
- US 7188622 B2 20070313 - MARTIN PHILIP G [US], et al
- US 7028689 B2 20060418 - MARTIN PHILIP G [US], et al
- US 7013895 B2 20060321 - MARTIN PHILIP G [US], et al
- US 7428903 B1 20080930 - JAPUNTICH DANIEL A [US], et al
- US 7311104 B2 20071225 - JAPUNTICH DANIEL A [US], et al

- US 7117868 B1 20061010 - JAPUNTICH DANIEL A [US], et al
- US 6854463 B2 20050215 - JAPUNTICH DANIEL A [US], et al
- US 6843248 B2 20050118 - JAPUNTICH DANIEL A [US], et al
- US 5325892 A 19940705 - JAPUNTICH DANIEL A [US], et al
- US 6883518 B2 20050426 - MITTELSTADT WILLIAM A [US], et al
- US RE37974 E 20030204 - BOWERS JOHN LAWRENCE [GB]
- US 5558089 A 19960924 - CASTIGLIONE DAVID M [US]
- US D412573 S 19990803 - CASTIGLIONE DAVID M
- US 23873708 A 20080926
- US 2007044803 A1 20070301 - XUE THOMAS J [US], et al
- US 2007068529 A1 20070329 - KALATOOR SURESH [US], et al
- US 7069930 B2 20060704 - BOSTOCK GRAHAM J [GB], et al
- US 6827764 B2 20041207 - SPRINGETT JAMES E [US], et al
- DAVIES, C. N.: "The Separation Of Airborne Dust Particles", INSTITUTION OF MECHANICAL ENGINEERS, 1952

Cited by

EP3007778A4; RU2625928C1; US10639506B2; US11247079B2; US11241595B2; WO2015031067A1; WO2021058536A1; US11812816B2; US11154735B2; US11433261B2; US9999546B2; US11166852B2; US9770057B2; US10602785B2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)

BA ME RS

DOCDB simple family (publication)

EP 2298096 A2 20110323; AU 2010224323 A1 20110407; BR PI1010461 A2 20130122; CN 102019051 A 20110420; JP 2011092698 A 20110512; KR 20110031144 A 20110324; MX 2010010234 A 20110317; RU 2010138662 A 20120327

DOCDB simple family (application)

EP 10177484 A 20100917; AU 2010224323 A 20100917; BR PI1010461 A 20100917; CN 201010290493 A 20100920; JP 2010209645 A 20100917; KR 20100092068 A 20100917; MX 2010010234 A 20100920; RU 2010138662 A 20100920