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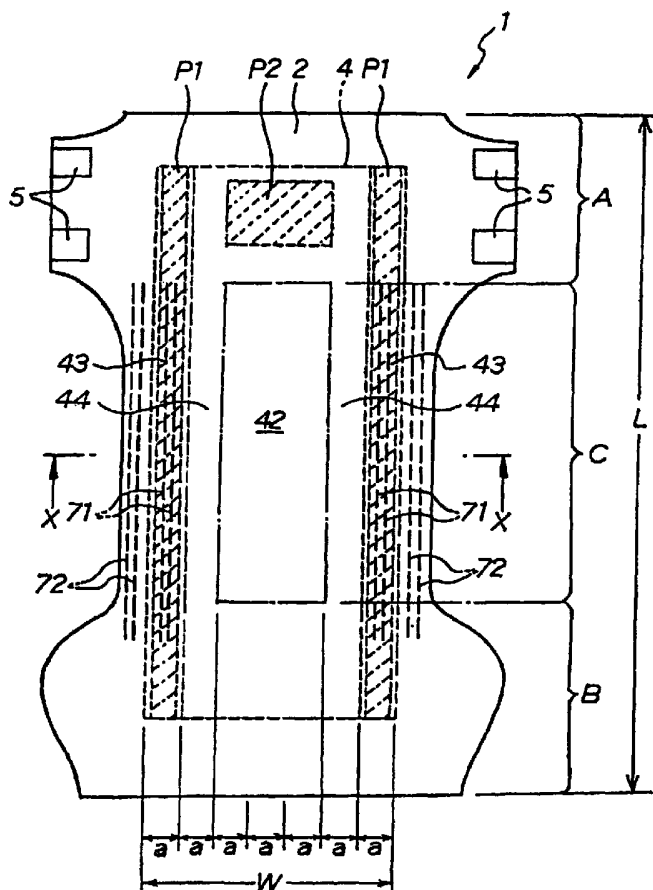
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[Continued on next page]

(54) Title: DISPOSABLE DIAPER



(57) Abstract: A disposable diaper comprising a liquid permeable topsheet 2, a liquid impermeable backsheet 3, and a liquid retentive absorbent member 4 and having a substantially oblong shape, the absorbent member 4 in the crotch portion having a middle absorbent portion 42 which occupies the middle 3/7 of the width of the absorbent member 4 and side absorbent portions 43 which each occupy the outermost 1/7 of the width of the absorbent member 4, wherein each side absorbent portion 43 has a larger unit absorption capacity than the middle absorbent portion 42, hydrophobic sheets 3 and 21 are disposed on the lateral outer edge of each side absorbent portion 43 to cover from the upper to lower surfaces of the edge, and an elastic member 71 is disposed in the part having each side absorbent portion 43 in the longitudinal direction of the side absorbent portion 43.



**(81) Designated States (national):** AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

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ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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# INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP 02/09367

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61F13/494 A61F13/49 A61F13/532

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 827 254 A (PATEL DHANRAJ SHANTILAL ET AL) 27 October 1998 (1998-10-27) column 4, line 16 - line 19; figures 2,3,6	1,3,6-9
Y	column 11, line 8 - line 62  column 13, line 34 - line 39 column 14, line 1 - line 27 ---	4,5,15, 16
Y	WO 99 51178 A (KIMBERLY CLARK CO) 14 October 1999 (1999-10-14) page 12, line 16 - line 23; figures 10,24 ---	4
Y	WO 91 19471 A (PROCTER & GAMBLE) 26 December 1991 (1991-12-26) page 3, line 27 - line 36; figures 1,4,6 page 17, line 13 - line 28 --- -/--	5

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

° Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
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- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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- \*&\* document member of the same patent family

Date of the actual completion of the international search

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International Application No

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 1 078 617 A (JOHNSON & JOHNSON INC) 28 February 2001 (2001-02-28) column 15, line 15 - line 20; figure 8 column 16, line 45 - line 49; claims 6-10 ---	15,16
X	US 4 410 324 A (SABEE REINHARDT N) 18 October 1983 (1983-10-18) column 4, line 35 - line 43; figures 4,8,14,28,29,32 column 5, line 24 - line 30 column 6, line 66 - line 68 -----	7

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/JP 02/09367

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☒ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-6,15-19

disposable diaper with side absorbent portions having a larger unit absorption capacity and hydrophobic sheet disposed on the lateral outer edge and an elastic member disposed in the side absorbent portions

2. Claims: 7-19

disposable diaper with side absorbent portions having a higher maximum degree of swelling for coming at least partially in contact with a wearer's thigh

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP 02/09367

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