



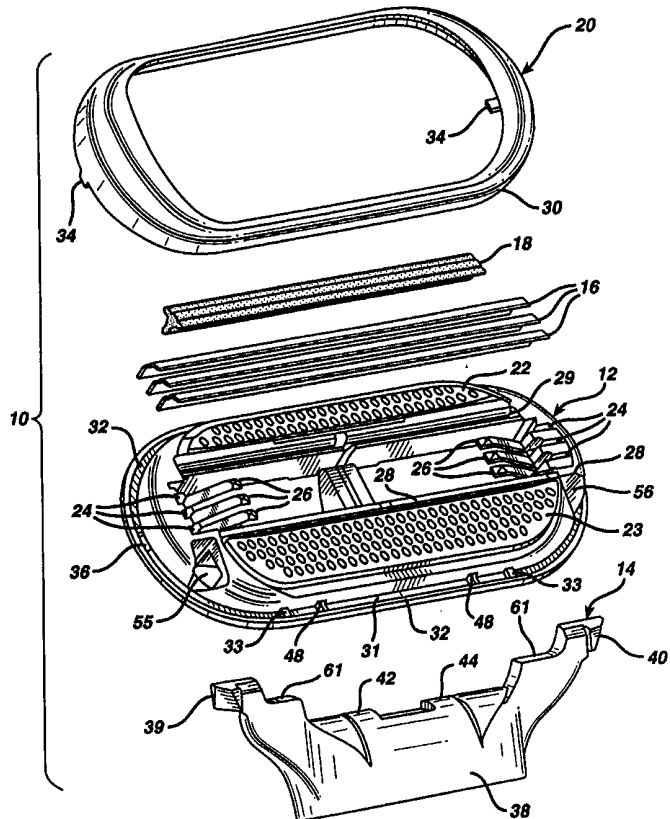
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification <sup>6</sup> : <b>B26B 21/40</b></p>	<p><b>A3</b></p>	<p>(11) International Publication Number: <b>WO 99/55499</b> (43) International Publication Date: 4 November 1999 (04.11.99)</p>
<p>(21) International Application Number: PCT/US99/08609 (22) International Filing Date: 20 April 1999 (20.04.99) (30) Priority Data: 09/066,499 24 April 1998 (24.04.98) US (71) Applicant: THE GILLETTE COMPANY [US/US]; Prudential Tower Building, Boston, MA 02199 (US). (72) Inventors: SWANSON, Gerald, Ted; 99 Monks Hill Road, Kingston, MA 02364 (US). FLAHERTY, Paul; 66 Highland Drive, Pembroke, MA 02359 (US). GUAY, Matthew, Joseph; 123 Laurel Wood Drive, North Attleboro, MA 02760 (US). METCALF, Stephen, C.; 120 Hanson Avenue, Newton, MA 02159 (US). (74) Agents: GALLOWAY, Peter, D.; Ladas &amp; Parry, 26 West 61st Street, New York, NY 10023 (US) et al.</p>		<p>(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p><b>Published</b> <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p> <p>(88) Date of publication of the international search report: 10 February 2000 (10.02.00)</p>

(54) Title: RAZOR BLADE SYSTEM

(57) Abstract

A safety razor system includes an elongated housing (12) pivotably attached to a member (14) connecting the housing to a handle. The housing (12) is substantially rectangular, having arcuate end portions. A plurality of razor blades (16) and a guard member (28) extend from the upper surface of the housing and an annular retainer clip (20) is disposed about the periphery of the housing serving to retain the blades (16) onto the housing (12) and position the blades relative to the guard member (28). The connecting member (14) pivotably supports the housing by four coaxial bearing surfaces (58, 59, 60, 61) contacting mating surfaces on the housing during rotation of the housing relative to the connecting member.



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# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/08609

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 6 B26B21/40

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 6 B26B

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)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 97 37819 A (GILLETTE CO ;APPRILLE DOMENIC VINCENT JR (US); CHAULK DONALD ROBER) 16 October 1997 (1997-10-16) cited in the application page 7, line 26 -page 9, line 10; figures 1-4	1,22,40,58
A	--- EP 0 276 066 A (GILLETTE CO) 27 July 1988 (1988-07-27) column 3, line 6 - line 29; figures 9,10	1,40,58
A	--- WO 97 17174 A (GILLETTE CO ;BROWN FRANK EDWARD (GB); OLDROYD BRIAN (GB)) 15 May 1997 (1997-05-15) cited in the application page 11, line 25 -page 12, line 4; figures 13-16	1,40,58
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Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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Date of the actual completion of the international search

14 December 1999

Date of mailing of the international search report

21.12.1999

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INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US 99/08609

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 970 784 A (ALTHAUS WOLFGANG ET AL) 20 November 1990 (1990-11-20) column 3, line 24 -column 4, line 65; figures 1-5	22
A	--- US 4 253 237 A (JACOBSON CHESTER F) 3 March 1981 (1981-03-03) the whole document -----	22

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US 99/08609

## 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.

## INTERNATIONAL SEARCH REPORT

International Application No. PCT/US 99/08609

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

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

1. Claims: 1-21, 40-64

Retainer member

2. Claims: 22-39

Interconnect member

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 99/08609

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