

(12) **UK Patent Application** (19) **GB** (11) **2 305 896** (13) **A**

(43) Date of A Publication 23.04.1997

(21) Application No 9520417.8

(22) Date of Filing 06.10.1995

(71) Applicant(s)

John Altria
22 Hawthornway, Northway, TEWKES, Glos,
GL20 8TQ, United Kingdom

Leslie William Elhway
32 Belle Vue Road, CINDERFORD, Glos, GL14 2AG,
United Kingdom

(72) Inventor(s)

John Altria
Leslie William Elhway

(74) Agent and/or Address for Service

John Altria
22 Hawthornway, Northway, TEWKES, Glos,
GL20 8TQ, United Kingdom

(51) INT CL⁶
A63B 55/08

(52) UK CL (Edition O)
B7B BTF2 B367

(56) Documents Cited
GB 2264465 A GB 1570275 A GB 1172525 A
GB 0850125 A US 4887835 A US 4714268 A
US 4302029 A

(58) Field of Search
UK CL (Edition N) **B7B BTF2**
INT CL⁶ **A63B 55/08**

(54) **Telescopic folding golf trolley**

(57) The trolley has upper and lower telescopic handles A,D eg of box-section steel. The beam axle C for the wheels is attached pivotally to the upper handle A by legs B and to the lower handle D by legs E. The lengths of the legs B,E is such that the axle C is drawn up towards the handles A,D for stowage as the handles are collapsed.

FIGURE 3

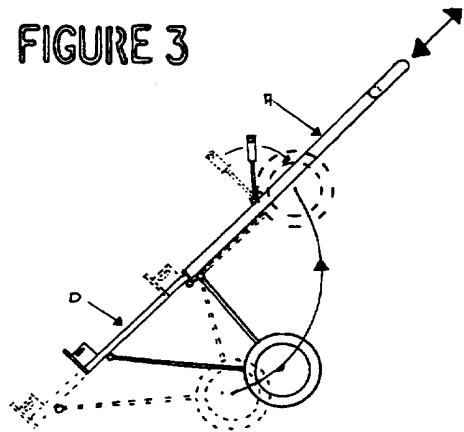
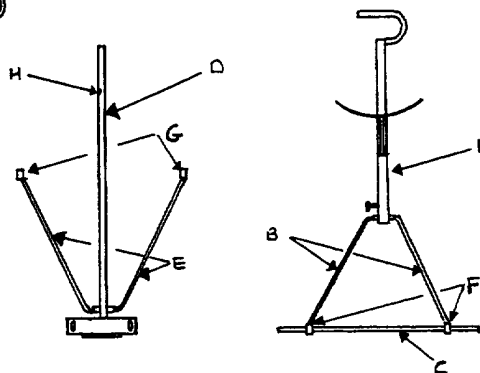


FIGURE 5



GB 2 305 896 A

1/5

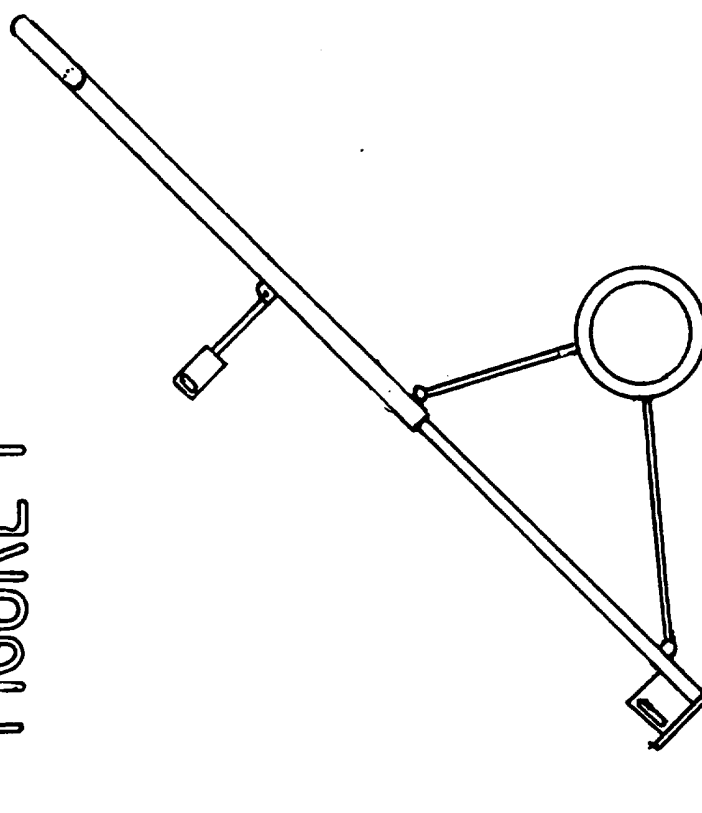
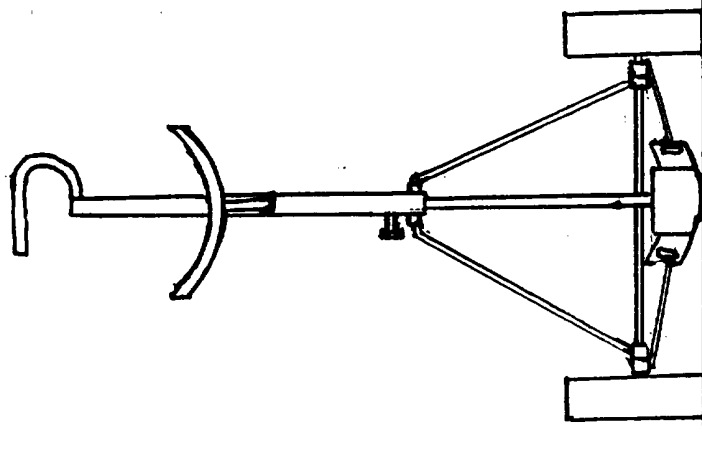
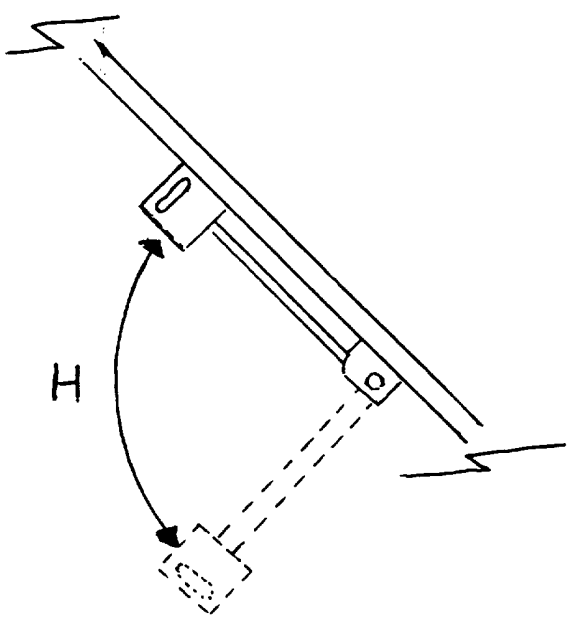
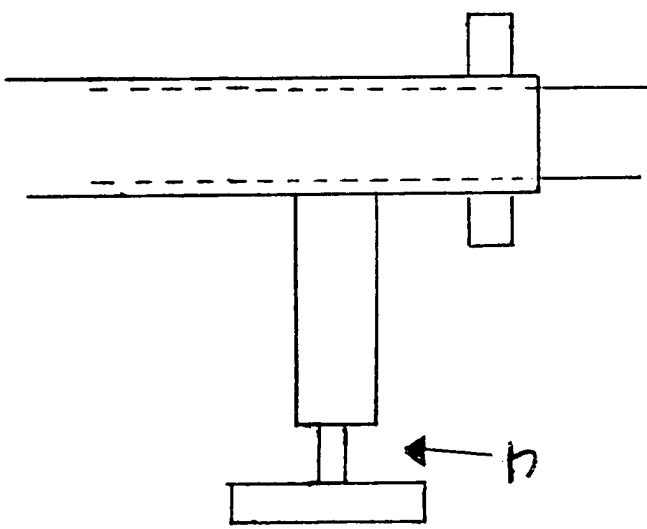
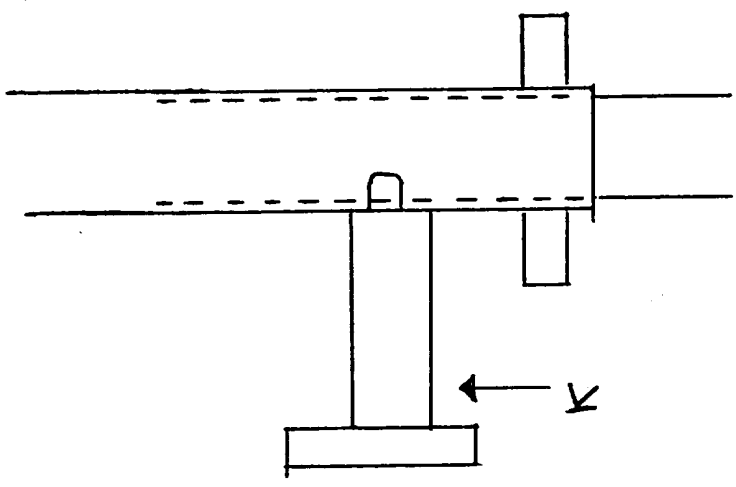


FIGURE 1

FIGURE 2



2/5



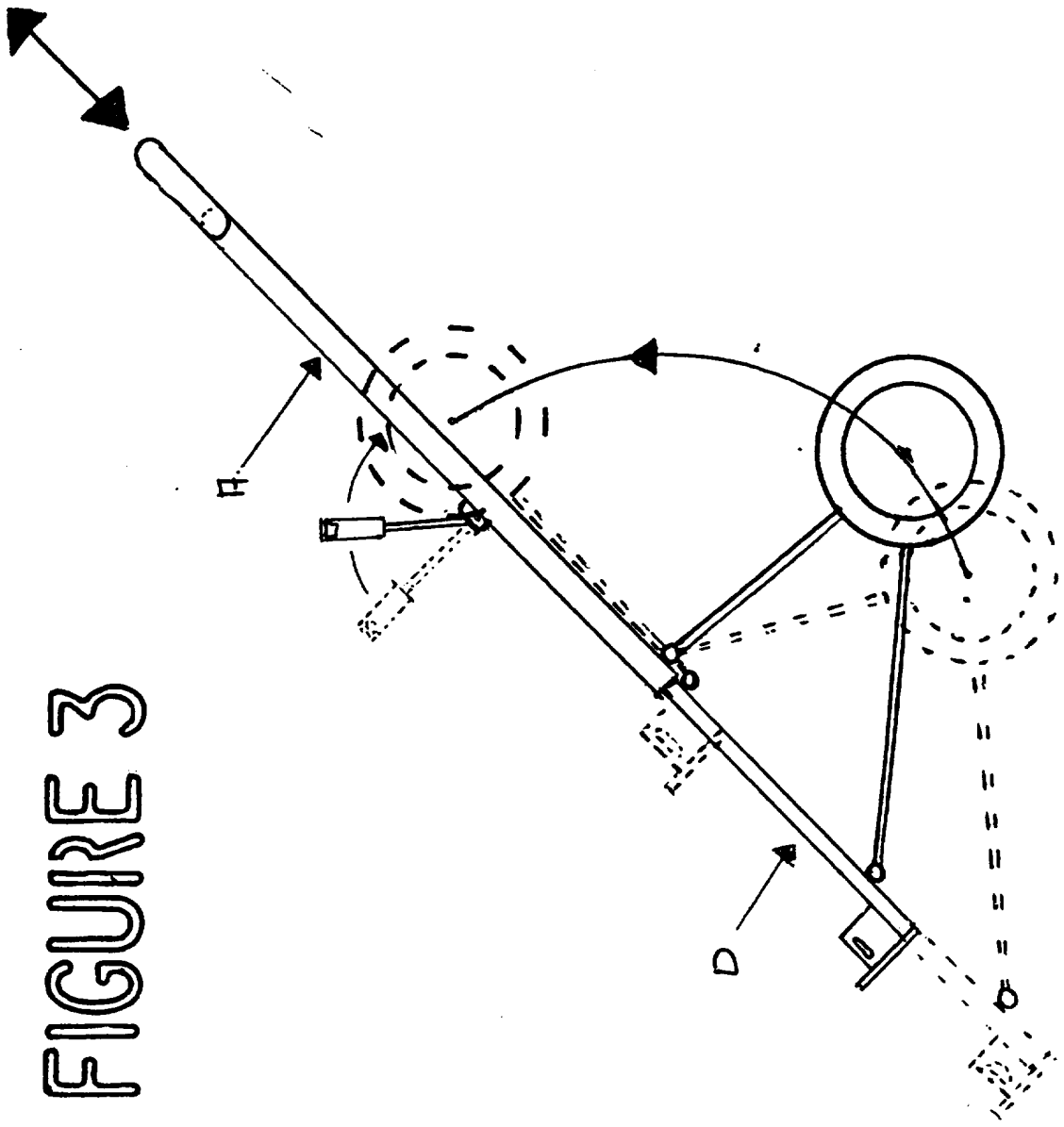


FIGURE 3

415

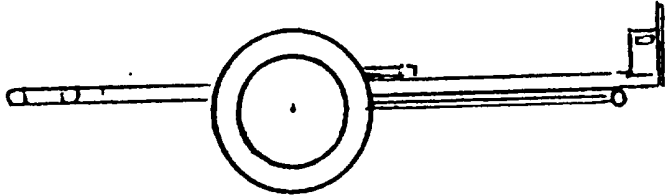
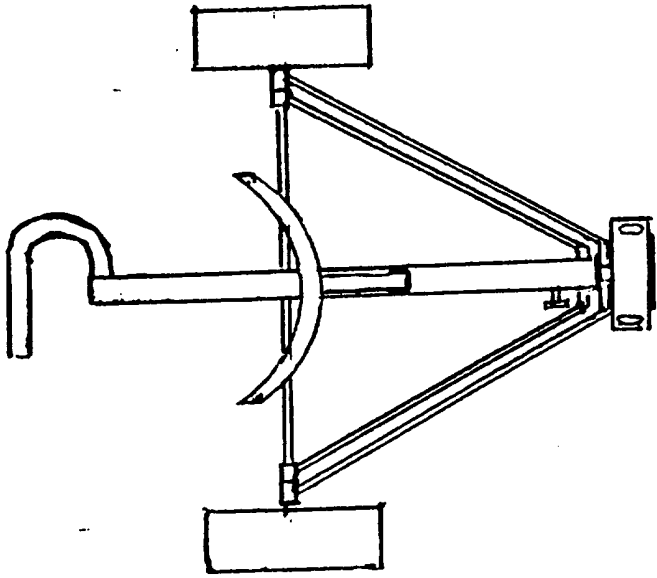


FIGURE 41

515

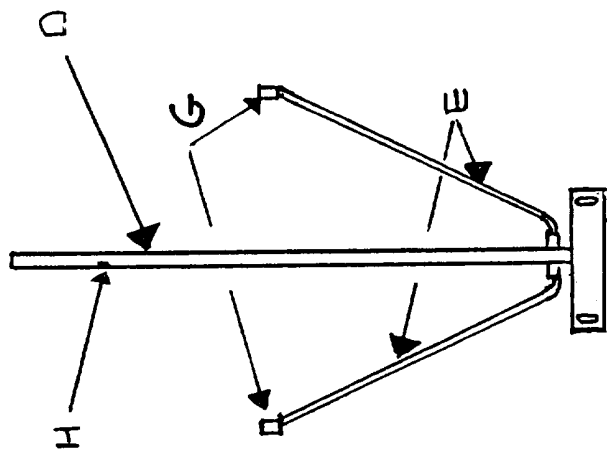
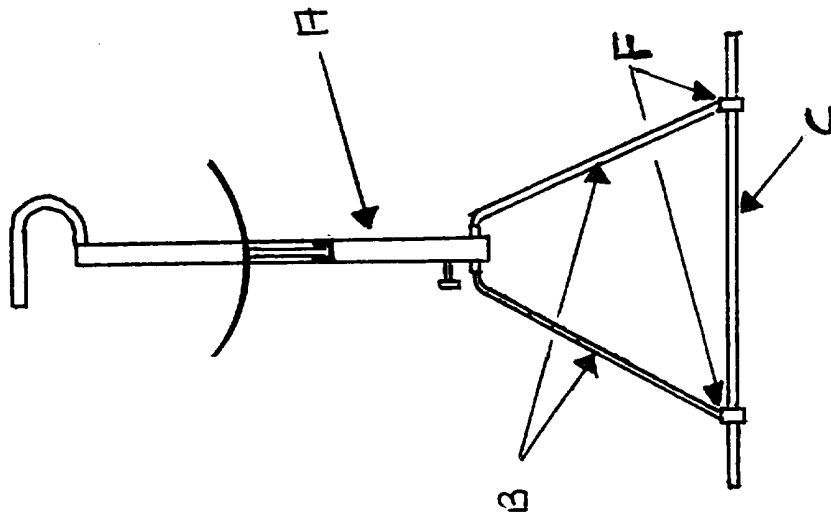


FIGURE 5

=1=

DESCRIPTION

THIS INVENTION RELATES TO A FULLY TELESCOPIC FOLDING MANUALLY OPERATED i.e HAND PULL GOLF TROLLEY,

THERE ARE MANY VARIATIONS IN THE GOLF TROLLEY INDUSTRY, EACH FILLING ITS OWN PLACE IN THE MARKET.

MANUAL AND POWERED(i.e.electric)ARE THE TWO MAIN DIFFERENCES IN TROLLEYS, BUT FURTHER TO THIS TROLLEYS DIFFER IN THE WAY THAT THEY FOLD DOWN, I.E. ONE PIECE FOLDING OR A TWO PIECE MACHINE AND SO ON, AS ALMOST ALL NEED TO FIT INTO CAR BOOTS, IT IS IMPORTANT TO REMEMBER THE AREA OF SPACE WHICH THE FOLDED MACHINE CONSUMES.

IN THE COLLAPSED POSITION THE TELESCOPIC ACTION OF THIS DESIGN ENABLES THE LOWER PART OF THE HANDLE TO RETRACT UP INTO THE UPPER HANDLE, THIS ACTION ALSO CAUSES THE TWO LEG ASSEMBLIES TO PULL ON THE FIXED BEAM AXLE, THUS LIFTING THE BEAM AXLE UP TO REST AGAINST THE HANDLE ASSEMBLIES.

FIGURE 1 SHOWS THE TROLLEY IN ITS NORMAL WORKING POSITION;

FIGURE 2 I)THE UPPER BAG SUPPORT IN THE FOLDED AND OPEN POSITION;
J)THE PLUNGER WITHDRAWN;
K)THE PLUNGER LOCATED;

FIGURE 3 COMMENCE THE TELESCOPIC ACTION PUSHING DOWN, SHOWING HOW THE LOWER HANDLE D) RETRACTS UP INTO UPPER HANDLE A), ALSO SHOWING HOW THE BEAM AXLE C) IS DRAWN UP TO REST AGAINST THE HANDLE ASSEMBLIES;

FIGURE 4 SHOWS THE TROLLEY IN ITS FULLY COLLAPSED POSITION;

FIGURE 5 SHOWS THE UPPER HANDLE A) AND LEG ASSEMBLIES B), WITH THE BEAM AXLE C), AND THE LOWER HANDLE D), AND LEG ASSEMBLIES E), ALSO AXLE BUSHES F&G, AND PLUNGER LOCATION HOLE H).

AS THE DRAWING FIG 5) SHOWS THE TROLLEY HAS TWO MAIN COMPONENTS THE UPPER HANDLE ASSEMBLY A) INCLUDING THE LEGS B) AND BEAM AXLE C).

AND THE LOWER HANDLE ASSEMBLY D), INCLUDING LEGS E), THE BEAM AXLE IS PERMANENTLY FIXED TO THE UPPER HANDLE LEGS B), VIA THE AXLE BUSHES F), AND THE LOWER HANDLE ASSEMBLY IS POSITIONED ONTO THE BEAM AXLE BY SPLAYING OUT THE TWO LEGS E), AND SLOTTING THE AXLE BUSHES G) OVER THE ENDS OF THE BEAM AXLE ONE AT A TIME, THE WHEELS ARE THEN FITTED TO THE AXLE, THE WHEELS HAVE A SELF FASTENING DEVICE WHICH ALSO KEEPS THE AXLE BUSHES G) OF THE LOWER HANDLE SECURE.

THE LOWER HANDLE IS OFFERED UP TO THE UPPER HANDLE AND THE TWO COMPONENTS THEN SLOT TOGETHER, THE PLUNGER FIG 2, J) NEEDS TO BE WITHDRAWN WHEN IT MAKES CONTACT WITH THE LOWER HANDLE TUBE, AS THE LOWER HANDLE TUBE PASSES THE PLUNGER SHAFT, THE PLUNGER CAN THEN BE RELEASED, AS THE TUBES SLOT FURTHER TOGETHER THE PLUNGER SHAFT WILL LOCATE ITSELF INTO ITS LOCATING HOLE FIG 5) H FOR NORMAL USE.

TO FOLD THE TROLLEY FOR STOWAGE FIG 4), THE PLUNGER IS WITHDRAWN AND IN THE SAME MOVEMENT THE UP HANDLE IS PUSHED DOWN (telescopic action) UNTIL THE TROLLEY HAS FULLY FOLDED.

=3=
CLAIMS

1 A MANUALLY OPERATED GOLF TROLLEY i.e. PULLED BY HAND, THE TWO MAIN PARTS OF THE TROLLEY BEING THE HANDLE ASSEMBLIES (FIG 5, A&D) THESE TWO COMPONENTS BEING MADE TO OPERATE IN A FULLY TELESCOPIC ACTION.

2 A TROLLEY AS CLAIMED IN 1, IS FULLY TELESCOPIC, BEING THAT FIG 5, A FEMALE & FIG 5, D MALE,

3 A TROLLEY CLAIMED WHEN REQUIRED FOR NORMAL WORKING POSITION (FIG 1), REQUIRES THE PLUNGER TO BE WITHDRAWN (FIG 2.B) AND THE TWO HANDLE ASSEMBLIES TO BE PULLED APART (FIG 3), IN A FULLY TELESCOPIC ACTION, UNTIL THE PLUNGER (FIG 2.C) CLICKS INTO THE LOCATION HOLE IN LOWER HANDLE TUBE (FIG 5.H)

4 A TROLLEY CLAIMED THAT WHEN THE PLUNGER IS WITHDRAWN (FIG 2.J) AND THE OPERATION IN (FIG 3) ACTIONED, THAT THE DIFFERENCE IN LENGTH BETWEEN THE TWO SETS OF LEGS CAUSES THE BEAM AXLE TO BE DRAWN UP TO THE HANDLE ASSEMBLIES (FIG 3), FOR STOWAGE (FIG 4).

5 A TROLLEY CLAIMED THAT THE ACTION OF THE TWO SETS OF LEGS AND THE DRAWING UP AND DOWN OF THE BEAM AXLE AS A RESULT OF THIS TELESCOPIC ACTION.

6 THE INCORPORATION OF A BEAM AXLE AS PER CLAIM 4&5 PREVENTS THE WHEELS FROM SPLAYING OUT AS OPPOSED TO TYPE NOT FITTED WITH A AXLE.



Application No: GB 9520417.8
Claims searched: 1 to 6

Examiner: John Twin
Date of search: 7 November 1995

Patents Act 1977
Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:
UK CI (Ed.N): B7B (BTF2)
Int CI (Ed.6): A63B 55/08
Other:

Documents considered to be relevant:

Category	Identity of document and relevant passage	Relevant to claims
X	GB2264465A (Dyet et al.)	1,5 at least
X	GB1570275 (Bruce)	1,5 at least
X	GB1172525 (Fry)	1,5 at least
X	GB850125 (Dwerryhouse)	1,5 at least
X	US4887835 (St.Lawrence Manufacturing)	1,5 at least
X	US4714268 (Fisherwell)	1,5 at least
X	US4302029 (Albertson)	1,5 at least

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.