Title: A WIDTH ADJUSTABLE ROLLATOR

Abstract: The invention relates to a rollator for use by walking-impaired persons and comprising first and second side parts which are interconnected via transverse connecting means, said rollator additionally comprising wheels and handlebars. The connecting means enable adjustment of the distance between the first side part and the second side part so that the width of the rollator may be varied.
A width adjustable rollator

The invention relates to a rollator for use for walking-impaired persons and comprising first and second side parts which are interconnected via transverse connecting means, said rollator additionally comprising wheels and handlebars.

The known rollators have a fixed width. This makes it difficult for the walking-impaired person to get through narrow door openings with the rollator. In addition, the fixed width of the rollator has the drawback that it can be strenuous for the walking-impaired persons to use the rollator since people are of different height and breadth.

The invention provides a rollator of the type mentioned in the opening paragraph, but which may be varied in width.

This is achieved according to the invention in that the connecting means enable adjustment of the distance between the first side part and the second side part. This provides a rollator which may be adjusted in width.

In an embodiment, the transverse connecting means are rods which are mounted on the two side parts. The rods are interconnected and may be moved in parallel relative to each other.

In a particularly expedient embodiment, the rods on the first side part and the second side part, respectively, are dimensioned such that the rods on the first side part fit a hollow on the rods on the second side part, thereby
allowing the rods to be moved mutually according to a telescope principle. This provides an adjustment principle which saves space.

In an embodiment, the rods may be moved mutually by using adjustment means. An easier and quicker adjustment of the width is ensured hereby.

In another expedient embodiment, the adjustment means are formed by a toothed wheel with a hand grip which is positioned on at least one of the rods on the second side part, said toothed wheel engaging teeth arranged on the rod on the first side part which is connected with said rod having the toothed wheel. This has been found to be a particularly simple method of adjusting the width, and the method is inexpensive at the same time.

In a further embodiment, the adjustment means are formed by an operating cylinder which either presses the rods apart from each other or sucks the rods together. This method is particularly expedient for very weak, walking-impaired persons, since adjustment does require any great physical effort.

In a particular embodiment, the rollator additionally comprises a central brake which brakes on at least one wheel at each side. This provides a particularly safe braking and minimizes the risk of accidents.

In another embodiment, the rollator additionally comprises light sources, e.g. light-emitting diodes. This ensures that the rollator can be seen in the dark, and if light-emitting diodes are used, a minimal consumption of
energy is achieved, thereby ensuring a longer service life of e.g. an accumulator.

In a further embodiment, the rollator comprises securing means for the wheels so that the wheels are easy to replace. Thereby, heavy wheels may be applied in the winter to achieve a better hold on the surface of the road.

The invention will now be explained more fully below with reference to the drawing, in which

fig. 1 shows a rollator seen from the front,

fig. 2 shows a rollator seen from the side,

fig. 3 shows the adjustment principle in connection with the width adjustment of the rollator.

Figure 1 shows a rollator seen from the front. The rollator is particularly suitable for walking-impaired persons. The rollator 1 comprises a first side part 3 and a second side part 5. The two side parts 3, 5 are interconnected via transverse rods 7.

In addition, the rollator comprises wheels 9 which are mounted on the side parts 3, 5 and handlebars 11, by means of which the walking-impaired person can push the rollator 1 in front of him and lean on the rollator 1.

In an expedient embodiment, light sources 15, e.g. light-emitting diodes, are mounted on the front of the rollator to make the walking-impaired person visible in the dark. If light-emitting diodes are used, the additional advantage is achieved that a minimum of energy is consumed,
and if e.g. an accumulator is used as a source of energy, the period of time elapsing between recharging or replacement will be extended.

In an embodiment of the invention, the rollator 1 comprises adjustment means 13 so that the width of the rollator 1 may be varied. This ensures that the rollator 1 can get through even narrow openings and the walking-impaired person can achieve an optimum adjustment of the distance between the handlebars 11, which gives a convenient walking posture. The adjustment means 13 will be explained more fully in connection with figure 3.

Figure 2 shows a rollator seen from the side. The rollator additionally comprises a seat 19 and a foam jacket 19 which is arranged around the upper transverse rods. The walking-impaired person can hereby sit down on the rollator 1 and relax, said foam pad serving as a backrest. In an embodiment, a central brake is mounted to achieve a safer braking of the rollator 1, said central brake braking on at least one wheel 9 at each side of the rollator 1. The central brake may e.g. be activated by a brake lever 21 positioned at one of the handlebars 11.

Figure 3 shows the adjustment principle in connection with the width adjustment of the rollator 1. The transverse connecting means 7 are formed by pipes, which are dimensioned such on one side part that they fit a hollow on a correspondingly positioned pipe on the other side part. The width may hereby be adjusted by moving the pipes into or out of each other according to a telescope principle. It should be mentioned that it is not necessarily pipes that are arranged according to the telescope principle, but also a principle where the pipes are posi-
tioned in parallel longitudinally of each other may be used. A combination thereof can also be used.

This adjustment can take place manually by moving the pipes by hand until the desired width of the rollator has been achieved, and by locking the adjustment, e.g. by inserting a pin which extends through the two telescopically connected pipes.

The adjustment can also take place via adjustment means 13, as shown in figure 3, where a toothed wheel 23 having a handle 25 is arranged on one pipe. A series of teeth 27 is arranged on the other pipe. When the handle 25 is pulled, the width will get either greater or smaller according to the direction of pull. The width variation depends on the circumference of the toothed wheel. Thus, it may be determined how great the width variation of the rollator 1 should be by selecting a toothed wheel with a corresponding circumference. In an embodiment there is a pin (not shown in the figure) which locks the width of the rollator when it is in its outer positions.

The adjustment means may also be provided in other ways, e.g. they may be formed by an operating cylinder which is either air-based or liquid-based, and which, depending on the pressure, either pumps the width greater or sucks it smaller.
Patent Claims

1. A rollator for use by walking-impaired persons and comprising first and second side parts which are interconnected via transverse connecting means, said rollator additionally comprising wheels and handlebars, characterized in that the connecting means enable adjustment of the distance between the first side part and the second side part so that the width of the rollator is varied.

2. A rollator according to claim 1, characterized in that the transverse connecting means are rods which are mounted on the two side parts, and that the rods are interconnected and may be moved in parallel relative to each other.

3. A rollator according to claims 1-2, characterized in that the rods on the first side part and the second part, respectively, are dimensioned such that the rods on the first side part fit a hollow on the rods on the second side part, thereby allowing the rods to be moved mutually according to a telescope principle.

4. A rollator according to claims 1-3, characterized in that the rods are moved mutually by using adjustment means.

5. A rollator according to claim 4, characterized in that the adjustment means are formed by a toothed wheel having a hand grip which is positioned on at least one of the rods on the second side part, said toothed wheel engaging teeth arranged on the rod on the
first side part which is connected with said rod having the toothed wheel.

6. A rollator according to claim 4, characterized in that the adjustment means are formed by an operating cylinder which either presses the rods away from each other or sucks the rods together.

7. A rollator according to claims 1-6, characterized in that the rollator additionally comprises a central brake which brakes on at least one wheel at each side.

8. A rollator according to claims 1-7, characterized in that the rollator additionally comprises light sources, e.g. light-emitting diodes.

9. A rollator according to claims 1-8, characterized in that the rollator comprises securing means for the wheels so that the wheels are easy to replace.
A. CLASSIFICATION OF SUBJECT MATTER

IPC7: A61H 3/04
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)

IPC7: A61H

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

SE,DK,FI,NO classes as above

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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[X] Further documents are listed in the continuation of Box C.  
[☑] See patent family annex.

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Name and mailing address of the ISA/Swedish Patent Office
Box 5055, S-102 42 STOCKHOLM
Facsimile No. +46 8 666 02 86

Authorized officer
Agneta Ånggård/Elis
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