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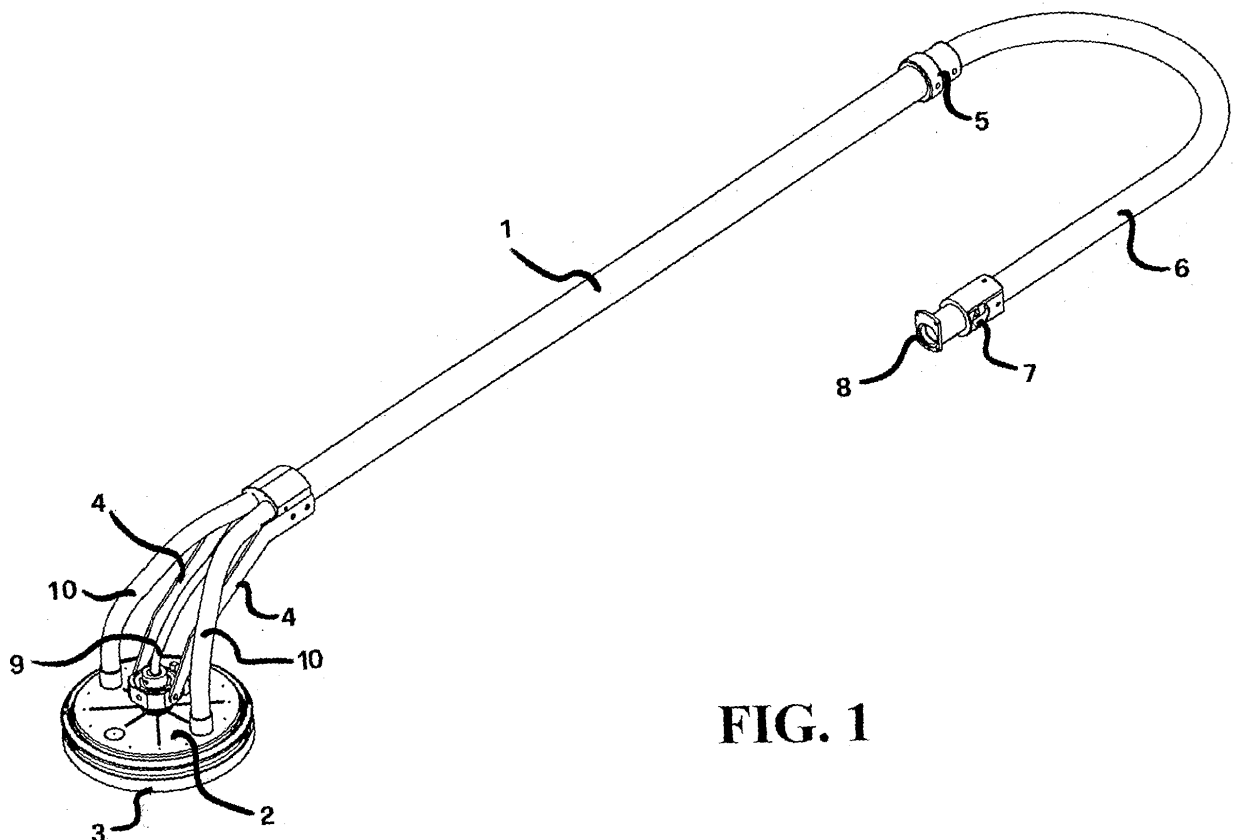
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(54) **Device for smoothing walls**

(57) A smoothing device comprising an abrasive carried at one end of a rod (1) is described. Said rod (1) may

be connected to an outer unit for the transmission of movement for the handling/movement of said abrasive.



**FIG. 1**

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## Description

[0001] This utility model consists in a wall sanding device, in particular a device with good portability features.

[0002] Wall sanding during the various phases of the building and maintenance process thereof is an operation which has been common for a long time. It is generally performed with sand paper or other abrasives and entails very different problems from that of floor sanding, precisely due to the work position.

[0003] Initially, such operation used to be carried out entirely by hand, rubbing the wall with sand paper of the correct grit. Such operation, however, was extremely effort-intensive and required the use of ladders and of other means to reach the highest areas of the wall.

[0004] Subsequently, smoothing devices equipped with an arm to be able to operate at different heights were provided. However, although less, the effort required was still considerable.

[0005] Power devices are disclosed in patents US 6 468 141, US 6 095 911, US 6 500 057, WO 2005/053 902, but these are rather complicated devices which may even be unsuitable for walls.

[0006] More recently, a device comprising a rod carrying an integrated motor and capable of driving into rotation a disc of sand paper has been devised. Said rod can be connected also to a debris-sucking device.

[0007] Such device, although working rather well and considerably reducing the effort, is still heavy due to the presence of the motor, which also represents an important but fragile component, requiring great care when putting away the device following use or during work breaks.

[0008] The drawbacks set forth above are brilliantly solved by the present utility model, consisting in a wall sanding device comprising an abrasive carried at a rod end, characterised in that said rod may be connected to an outer transmission unit for the transmission of movement in order to move such abrasive.

[0009] The present utility model will now be described in greater detail, with reference to the accompanying drawing, wherein:

fig. 1 is a perspective view, with parts removed, of a device according to the present model; and  
fig. 2 is a view of a device detail.

[0010] The device according to the present model comprises an internally-hollow tubular rod 1, an end whereof carries a disc 2 which, in turn, carries a platen 3. Platen 3 supports a sheet of sand paper (or another abrasive) and is capable of rotating inside disc 2. Preferably, said disc 2 has a diameter ranging from 15 to 23 cm and may be covered in plastics. The disc crown is surrounded by a nylon brush for removing the debris as they form. Preferably, the rod is made of aluminium, has a diameter between 3 and 5 cm and a length between 80 and 150 cm. The connection between rod 1 and disc

2 is accomplished by a pair of brackets 4. Brackets 4 are preferably made of aluminium.

[0011] The other end of rod 1 bears a hose 6 by means of a knuckle joint 5. Said hose 6 may be connected at 7 to a source of suction and at 8 to a source of movement. Inside rod 1, the movement is transmitted by a transmission cable, whose other end departs therefrom and connects, through portion 9 thereof, to platen 3. In turn, the sucking inlet is connected to platen 3 through pipes 10, also departing from rod 1.

[0012] The operation of a device of this kind is extremely simple.

[0013] A source of suction is connected at said point 7. The source of suction may be any source of vacuum, for example a Hoover. At said point 8 there is connected instead a source of movement. Any source of movement is suitable to be connected at 8, be it manual, such as a crank, or mechanical, such as a motor. Platen 3 is thereby driven into motion and applied to the wall to be smoothed. The rotation of platen 3 causes the abrasive to act on the wall, smoothing it. The resulting debris are first brushed away, removing them from the wall, then sucked by the source of suction. The wall can thereby be entirely smoothed by suitably moving rod 1.

[0014] With respect to the known devices, the device according to the present utility model is lighter, handier and more reliable. Moreover, even the dropping of rod 1 cannot jeopardise the operation thereof, since there are no sensitive motors carried by the same. Finally, the device is extremely versatile, since the same device can be connected to multiple, various sources of movement depending on availability, ensuring good operation in any circumstance.

## Claims

1. smoothing device comprising an abrasive carried at one end of a rod (1), **characterised in that** said rod (1) can be connected to an outer unit for the transmission of movement for moving such abrasive.
2. Device as claimed in claim 1), **characterised in that** said rod (1) is an internally-hollow tubular rod.
3. Device as claimed in claim 1) or 2), **characterised in that** one end of said rod (1) carries a disc (2) which, in turn, carries a platen (3).
4. Device as claimed in claim 3), **characterised in that** said rotary head (3) supports a sheet of sand paper and is capable of rotating inside the disc (2).
5. Device as claimed in claim 3) or 4), **characterised in that** said disc (2) has a diameter between 15 and 23 cm.
6. Device as claimed in any one of claims 3) to 5), **char-**

**acterised in that** said disc (2) is plastic-coated.

7. Device as claimed in any one of claims 3) to 6), **characterised in that** the crown of the disc (2) is surrounded by a nylon brush for removing the debris as they form. 5
8. Device as claimed in any one of the preceding claims, **characterised in that** the rod (1) is made of aluminium. 10
9. Device as claimed in any one of the preceding claims, **characterised in that** said rod (1) has a diameter between 3 and 5 cm and a length between 80 and 150 cm. 15
10. Device as claimed in any one of the preceding claims, **characterised in that** the other end of the rod (1) carries, by means of a knuckle joint (5), a hose (6). 20
11. Device as claimed in claim 10), **characterised in that** said hose (6) is connected (at 7) to a source of suction and (at 8) to a source of movement. 25
12. Device as claimed in claim 11), **characterised in that** inside the rod (1) the movement is transmitted by a transmission cable, whose other end departs therefrom and connects, through a portion (9) thereof, to the rotary head (3). 30
13. Device as claimed in claim 11) or 12), **characterised in that** the source of suction is connected to the rotary head (3) by means of pipes (10) also departing from the rod (1). 35
14. Device as claimed in any one of the preceding claims, **characterised in that** said source of movement is manual. 40
15. Device as claimed in claim 14), **characterised in that** said source of movement is a crank. 45
16. Device as claimed in any one of claims 1) to 13), **characterised in that** said source of movement is mechanical. 50
17. Device as claimed in claim 16), **characterised in that** said source of movement is a motor. 55

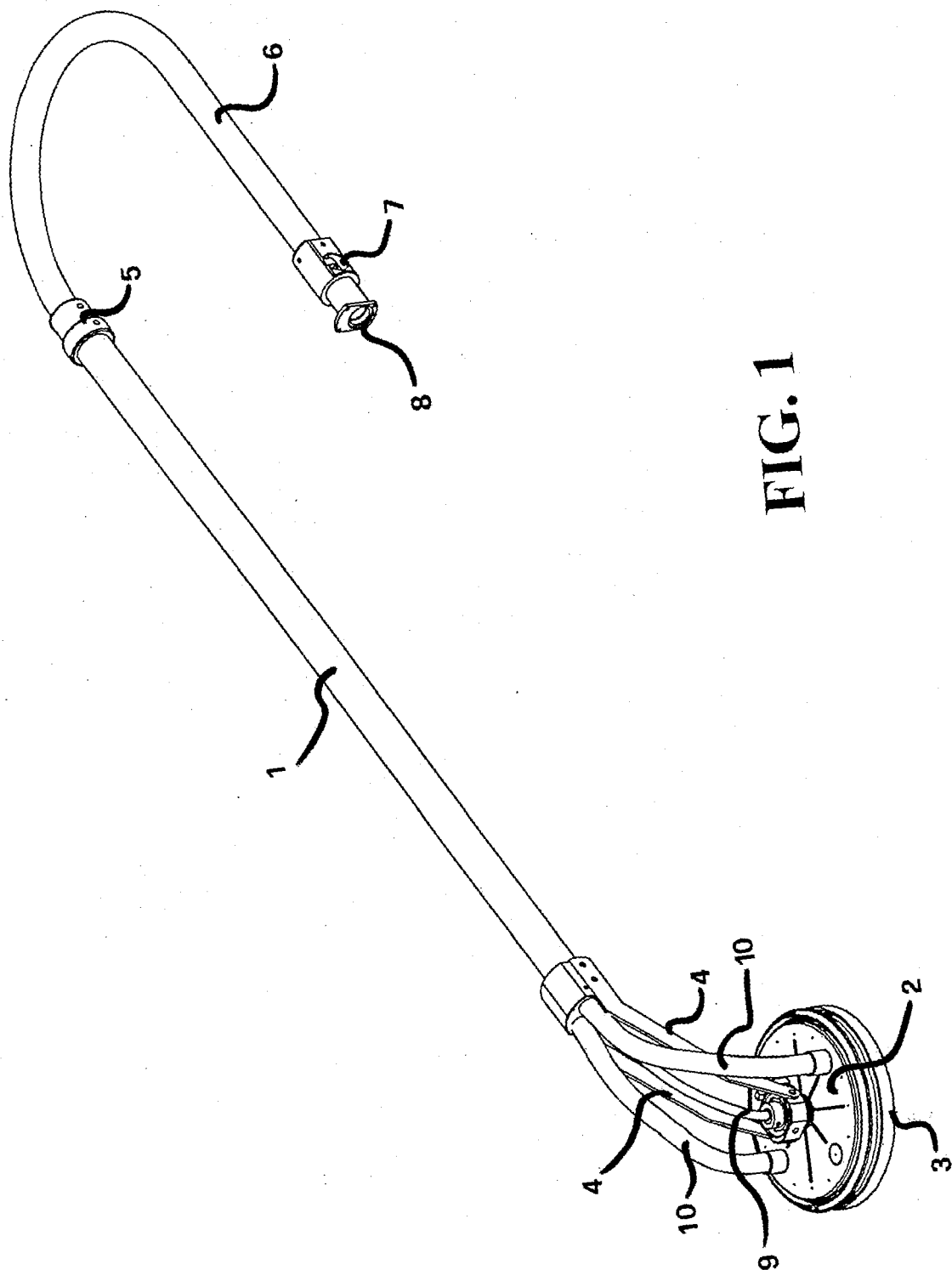
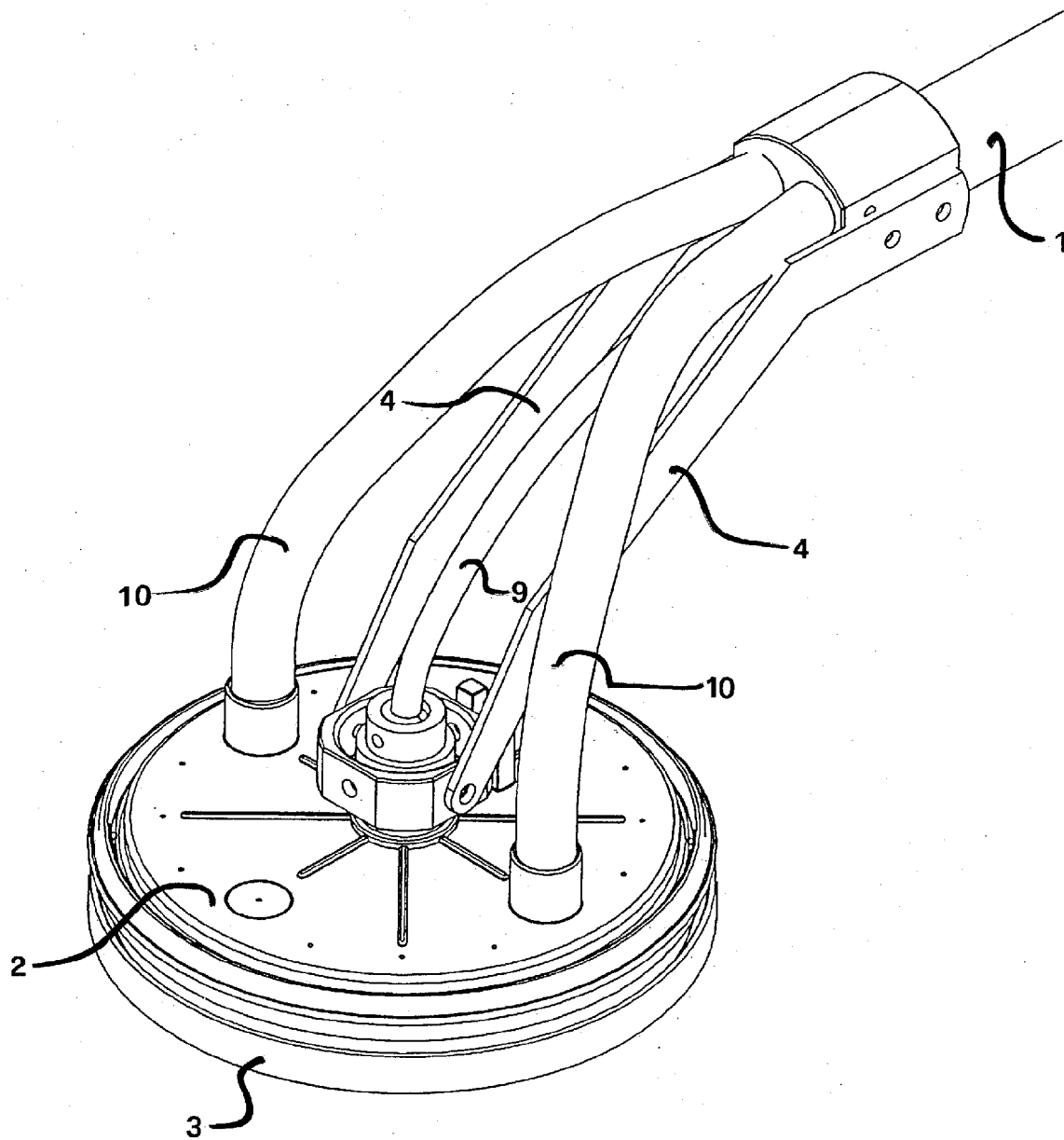


FIG. 1



**FIG. 2**



European Patent  
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# EUROPEAN SEARCH REPORT

Application Number  
EP 06 12 2753

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The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
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Place of search		Date of completion of the search	Examiner
The Hague		5 February 2007	Sluimer, Paul
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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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05-02-2007

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