FORM 1
COMMONWEALTH OF AUSTRALIA
PATENTS ACT 1952

APPLICATION FOR A STANDARD PATENT

I/We, SVERRE DAMM
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NORWAY

hereby apply for the grant of a standard patent for an invention entitled:

SPARE WHEEL ATTACHMENT ASSEMBLY

which is described in the accompanying complete specification

Details of basic application(s):

Number of basic Name of Convention country in Date of basic
application which basic application was application
filed

883909 NO 01 SEP 88

My/our address for service is care of GRIFFITH HACK & CO., Patent Attorneys, 601 St. Kilda Road, Melbourne 3004, Victoria, Australia.

DATED this 28th day of February 1989

SVERRE DAMM
GRIFFITH HACK & CO.

TO: The Commissioner of Patents.
1. Spare wheel attachment assembly for large motor vehicles, CHARACTERIZED IN one end of an arm (1) being turn-ably mounted to a shaft journal (12) arranged horizontally at the front end of the body (9) of the vehicle, whereby the shaft journal (12) being arranged in the longitudinal direction of the body (9), an outer telescopic arm (2) being arranged slideably on the arm (1) and being adapted for secu-ring a spare wheel (11), a wire (5) being secured to the outer end of the telescopic arm (2), guided downwards between two pulleys (3, 4) secured to e.g. the front tail board (10) of the body (9), somewhat lower than the securement of the wire (5) to the telescopic arm (2) in the vertical position of the arm, and the wire (5) being guided from the pulleys (3, 4) to a winch (6) in the level of the body (9), whereby the winch (6) can be activated from the opposite side of the body (9).
TO BE COMPLETED BY APPLICANT

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Complete Specification for the invention entitled:
SPARE WHEEL ATTACHEMENT ASSEMBLY

The following statement is a full description of this invention including the best method of performing it known to me:-
The present invention is related to a spare wheel attachment assembly for motor vehicles having wheels not to be handled manually.

Spare wheels for larger motor vehicles, such as large lorries, are secured to the truck body or possibly a separate body by means of different auxiliary devices such as lifting tackles or winches of different kinds. These wheels are very heavy so they cannot be mounted manually. The devices used today are relatively space consuming and the time consumption for mounting is comparatively long.

With the spare wheel attachment assembly according to the present invention is provided a device consuming a minimum of space, enabling lowering of the spare wheel and the preceding mounting of the spare wheel very quickly and at the same time the operator is secured against possible unforeseen injuries as the operator during the operation is situated on the opposite side of the body in relation to the spare wheel. These advantages are achieved with the attachment assembly according to the invention, as defined by the features of the patent claims.

The drawing discloses a front view of a truck body where the attachment assembly is arranged at the front edge on the right side of the body and where the spare wheel as such is disclosed in broken lines for better clarity. The assembly is furthermore disclosed in three different positions.

A shaft journal 12 is secured to the front edge of a truck body 9, extending in the longitudinal direction of the body. The drawing discloses the shaft journal 12 secured to the right hand side of the body. A lever 1 is secured turnably to the shaft journal 12 in such a way that it can be turned in a plane perpendicularly to the longitudinal direction of the body 9. A telescopic arm 12 is arranged around the lever 1 which in the Figures II and III is disclosed in the retracted position, whereby I discloses the arm in a somewhat extended position.

The outer telescopic arm 2 is adapted for mounting a spare wheel 11 and a wire 5 is secured near the outer end
of the arm. The wire is guided from the telescopic arm downwards between two pulleys which are arranged horizontally near and parallel to each other, and the wire is further guided to preferably a winch arranged on the body. The winch is activated by a crank handle arranged on the opposite side of the body, by means of a connection rod. The pulleys are secured to the front tail board at a level somewhat lower than the securement of the wire to the telescopic arm.

When a spare wheel is to be lifted in place, the spare wheel is mounted to the telescopic arm, whereby this is extended to a suitable length for securing the spare wheel to the arm. The winch thereafter is activated by means of the crank handle such that the wire is pulled in and the telescopic arm is pulled up after retracting to an abutment. In the position the telescopic arm then will be completely retracted and the winch is activated until the telescopic arm substantially achieves its vertical position whereafter the spare wheel may be pushed manually across the neutral position for which very little forces are needed. Thereafter wire is given out from the winch by corresponding activation of the crank handle until the spare wheel abuts against a bracket secured to the body and the telescopic arm simultaneously is received in a claw secured to the front tail board. In this position the spare wheel is secured partly by abutment against the bracket by way of its own weight and partly by the securement of the telescopic arm in the claw which additionally may have a locking device to secure that the telescopic arm not unexpectedly may be moved out of the claw.

When bringing back the spare wheel, the locking device first is released from the claw whereafter the winch is activated by means of the crank handle in such a way that the wire turns the telescopic arm counter clockwise on the Figure, until the telescopic arm is substantially in a vertical position, whereafter the operator may push the spare wheel in such a way that the telescopic arm
2 is turned beyond the outside of the body and the crank handle 7 is activated to give after the wire 5 until the spare wheel 11 arrives the surface or possibly abuts against parts of the body in which case the telescopic arm 2 is extended until the spare wheel hits the surface as the spare wheel hereby is sliding along the body parts. The spare wheel thereafter is released from the telescopic arm and another wheel is mounted as described above.
CLAIMS
THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

1. Spare wheel attachment assembly for large motor vehicles, CHARACTERIZED IN one end of an arm (1) being turn-ably mounted to a shaft journal (12) arranged horizontally at the front end of the body (9) of the vehicle, whereby the shaft journal (12) being arranged in the longitudinal direction of the body (9), an outer telescopic arm (2) being arranged slideably on the arm (1) and being adapted for securing a spare wheel (11), a wire (5) being secured to the outer end of the telescopic arm (2), guided downwards between two pulleys (3, 4) secured to e.g. the front tail board (10) of the body (9), somewhat lower than the securement of the wire (5) to the telescopic arm (2) in the vertical position of the arm, and the wire (5) being guided from the pulleys (3, 4) to a winch (6) in the level of the body (9), whereby the winch (6) can be activated from the opposite side of the body (9).

2. Assembly according to claim 1, CHARACTERIZED IN the winch (6) may be activated on the opposite side of the body (9) by a crank handle (7) by means of a connection rod (8).

3. Assembly according to claim 1-2, CHARACTERIZED IN the telescopic arm (2) in the driving position of the spare wheel (11) is captured by a claw (14) secured to the front tail board (10) of the body (9) and being lockable in this position, whereby the spare wheel (11) in the driving position substantially is resting on a bracket (17) connected with the body (9).
DRAWINGS