

Claims:

1. Method for operating an elevator (1) for an inspection,
wherein the elevator (1) comprises
- 5 - a cabin (3) being displaceable along an elevator shaft (5),
 - a drive engine (11) for displacing the cabin (3),
 - a plurality of shaft doors (23), at least one of the shaft doors (23) being ar-
ranged at each of multiple floors (21) including a lowermost floor (21') and at least one
upper floor (21'', 21'''), each of the shaft doors (23) having an associated active door
10 drive (25) for reciprocally opening and closing the shaft door (23),
 - a plurality of signal receptors (33), at least one of the signal receptors (33) be-
ing arranged at each of the multiple floors (21),
 - an engine controller (13) for controlling an operation of the drive engine (11),
 - a door controller (29) for controlling an operation of the active door drives
15 (25) of the shaft doors (23),
the method comprising:
- receiving a requesting signal at one of the signal receptors (33) located at one of the
floors (21),
- in reaction to the receiving of the requesting signal:
- 20 - if the one of the floors (21) is not the lowermost floor (21'), instructing the en-
gine controller (13) to control the drive engine (11) to displace the cabin (3) to a first po-
sition such that a roof (41) of the cabin (3) is adjacent to the shaft door (23) at the one of
the floors (21),
 - if the one of the floors (21) is the lowermost floor (21'), instructing the engine
25 controller (13) to control the drive engine (11) to displace the cabin (3) to a second posi-
tion above the lowermost floor (21'),
 - then, instructing the door controller (29) to control the door drive (25) of the
shaft door (23) at the one of the floors (21) to actively open, and
 - switching the engine controller (13) to an inspection mode.
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2. Method of claim 1,
wherein, in the inspection mode, the engine controller (13) prevents the drive engine (11)
from displacing the cabin (3) after the cabin (3) having arrived at one of the first and

second position, respectively.

3. Method of one of the preceding claims,
wherein, if the one of the floors (21) is not the lowermost floor (21'), the engine control-
5 ler (13) controls the drive engine (11) to displace the cabin (3) to a position such that the
roof (41) of the cabin (3) is flush with a bottom (37) at the one of the floors (21).

4. Method of one of the preceding claims,
wherein, for enabling the receiving of the requesting signal, a technician (39) initiating
10 the transmitting of the receiving signal has to be at the one of the floors (21) in proximity
to one of the signal receptors (33) being arranged at the floor (21) and outside of the ele-
vator shaft (5).

5. Method of one of the preceding claims,
15 wherein the signal receptor (33) receives the requesting signal via short range wireless
data communication from a data communication device (45).

6. Method of claim 5,
wherein the requesting signal is transmitted by a mobile data communication device (45)
20 carried by a technician.

7. Method of one of the claims 1 to 4, wherein the signal receptor (33) receives the
requesting signal via manually actuating the signal receptor (33) by a technician (39).

25 8. Method of one of the preceding claims, the method further comprising:
- receiving a finalising signal at the one signal receptor (33),
- in reaction to receiving the finalising signal:
- instructing the door controller (29) to control the door drive (25) of the shaft
door (23) at the one of the floors (21) to actively close, and
30 - switching the engine controller (13) back to a normal operation mode.

9. Method of one of the preceding claims,
wherein, upon receiving the requesting signal, an identity of a technician (39) initiating a

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transmission of the requesting signal is detected.

10. Method of claim 9 referring to claim 8,
wherein, upon receiving the finalising signal, an identity of the technician (39) initiating
5 the transmission of the finalising signal is detected and the engine controller (13) is
switched back to a normal operation mode only in case the identity of the technician (39)
initiating the transmission of the requesting signal is identical to the identity of the technician (39) initiating the transmission of the finalising signal.

10 11. Elevator (1) comprising:
- a cabin (3) being displaceable along an elevator shaft (5),
- a drive engine (11) for displacing the cabin (3),
- a plurality of shaft doors (23), at least one shaft door (23) being arranged at
each of multiple floors (21) including a lowermost floor (21') and at least one upper floor
15 (21'', 21'''), each of the shaft doors (23) having an associated active door drive (25) for
reciprocally opening and closing the shaft door (23),
- a plurality of signal receptors (33), at least one signal receptors (33) being arranged at each of the multiple floors (21),
- an engine controller (13) for controlling an operation of the drive engine (11),
20 - a door controller (29) for controlling an operation of the active door drives
(25) of the shaft doors (23),
wherein the elevator (1) is configured to one of executing and controlling the method according to one of claims 1 to 10.

25 12. The elevator (1) of claim 11,
wherein each of the signal receptors (33) is arranged at the one of the floors (21) and outside of the elevator shaft (5).

30 13. The elevator of one of claims 11 and 12,
wherein each of the plurality of signal receptors (33), the engine controller (13), the door controller (29) and a communication established for exchanging signals between the plurality of signal receptors (33), the engine controller (13) and the door controller (29) is configured to fulfil SIL3 requirements.

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14. Computer program product comprising one of

- computer readable instructions which, when performed by a processor in an elevator (1) according to one of claims 11 to 13, instructs the elevator (1) to one of executing and controlling the method according to one of claims 1 to 10, and

5 - computer readable instructions which, when performed by a processor in a mobile data communication device (45), instructs the mobile data communication device (45) to transmit one of the requesting signal and the finalising signal for triggering an elevator (1) according to one of claims 11 to 13 to one of executing and controlling the method according to one of claims 1 to 10.

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15. Computer readable medium comprising a computer program product according to claim 14 stored thereon.

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