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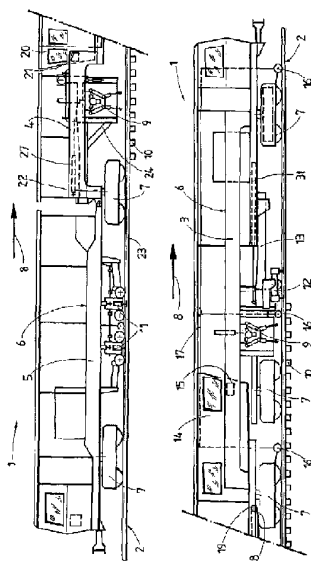
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[Fortsetzung auf der nächsten Seite]

(54) Title: MACHINE FOR CARRYING OUT A TRACK GAUGE CORRECTION

(54) Bezeichnung: MASCHINE ZUR DURCHFÜHRUNG EINER GLEISLAGEKORREKTUR



(57) Abstract: The invention relates to a machine (1) for carrying out a track gauge correction, comprising a multi-component machine chassis (6), provided with a stabiliser unit (11) and a satellite chassis (13), adjustable relative to the machine chassis (6) by means of a drive (31) and comprising a packing unit (9) and a track lifting unit (12). A second packing unit (9) is arranged between the satellite chassis (13) and the stabiliser unit (11) which may be displaced relative to the machine chassis (6) by means of a drive (27).

(57) Zusammenfassung: Eine Maschine (1) zur Durchführung einer Gleislagekorrektur, besteht aus einem mehrteiligen Maschinenrahmen (6), dem ein durch einen Antrieb (31) relativ zum Maschinenrahmen (6) verstellbarer, ein Stopfaggregat (9) sowie ein Gleishebeaggregat (12) aufweisender Satellitenrahmen (13) und ein Stabilisationsaggregat (11) zugeordnet ist. Zwischen Satellitenrahmen (13) und dem Stabilisationsaggregat (11) ist ein zweites Stopfaggregat (9) angeordnet, das durch einen Antrieb (27) relativ zum Maschinenrahmen (6) verschiebbar ist.

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Zur Erklärung der Zweibuchstaben-Codes und der anderen Abkürzungen wird auf die Erklärungen ("Guidance Notes on Codes and Abbreviations") am Anfang jeder regulären Ausgabe der PCT-Gazette verwiesen.

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A machine for performing a track position correction.

The invention relates to a machine for performing a track position correction, including a multipart machine frame with which are associated a satellite
5 frame, adjustable relative to the machine frame by means of a drive and including a tamping unit and a track lifting unit, and a stabilizing unit.

A machine of this type, known from GB 2 146 374, moves forward continuously during working operations while the satellite frame, together with the tamping
10 unit is moved discontinuously from tamping site to tamping site. Subsequent to tamping, the track is lowered in a controlled way by means of the stabilizing units.

It is the object of the present invention to provide a machine of the specified
15 kind by which a track with irregular spacing of the sleepers can be tamped better.

According to the invention, this object is achieved with a machine of the type mentioned at the beginning by the features cited in the characterizing clause of
20 claim 1.

Due to this configuration, it is possible in the course of continuous forward travel of the machine to carry out a first tamping operation in combination with a track position correction and, subsequent thereto, a further tamping
25 operation during which the track position remains unchanged. Immediately thereafter, the tamped track is lowered at once in a controlled manner by means of the stabilizing units and thus is brought into a permanent position.

Additional advantages and features of the invention become apparent from the
30 further claims and the drawing.

The invention will be described in more detail below with reference to embodiments represented in the drawing in which

Figs. 1 and 2 show a side view of a front part and a rear part, respectively, of a machine for track position correction,

Figs. 3, 4 and 5 each show a detail view of a subframe.

A machine 1, visible in Figs. 1 and 2, for the correction of a position of a track 2 comprises a machine frame 6, composed of three frame parts 3,4,5, and on-track undercarriages 7. The front frame part 3 - with respect to a working direction 8 - and the central frame part 4 each have a tamping unit 9 for tamping sleepers 10. Stabilizing units 11 are associated with the rear frame part 5.

The first tamping unit 9 positioned on the front frame part 3 is arranged, together with a preceding track lifting unit 12, on a satellite frame 13. The latter has a front end mounted on the frame part 3 for longitudinal displacement by means of a drive 31, while a rear end is supported on an individual on-track undercarriage 7. Situated above the same is a first work cabin 14 which is connected to the front frame part 3 and has a control device 15. A reference system 17 comprising measuring axles 16 is provided for the track position correction.

The central frame part 4 is connected via a front end 18 to the front frame part 3 by means of an articulated connection 19. A second work cabin 20 having a control device 21 is provided between said articulated connection 19 and the second tamping unit 9. A rear end 22 of the central frame part 4 is supported on an on-track undercarriage 7.

As visible in Figs. 3, 4 and 5, two tamping units 9, each associated with a rail 23, are mounted for vertical adjustment by means of drives 25 on a common subframe 24. The subframe 24 has a rear end 26 displaceably mounted on the central frame part 4 and is displaceable relative to the latter in the longitudinal direction of the machine by means of a drive 27. A front end 28 of the subframe 24 - positioned between two support frames 35 extending in the longitudinal direction of the machine - has two support rollers 29 designed to roll on guide rails 30.

The subframe 24 includes two drives 33, each comprising a pressure roller 32. The drives 33 push the pressure rollers 32 against an underside 34 of the frame part 4.

In working operations for track position correction, the machine 1 is advanced continuously in the working direction 8. Only the satellite frame 13 and the subframe 24 are advanced cyclically with corresponding actuation of the drives 31, 27 and stopped locally for tamping. During this, only every other sleeper is tamped by means of the first tamping unit 9 on the front frame part 3, while simultaneously the track 2 is brought into its correct position by cooperation of the reference system 17 and the track lifting unit 12. This first partial tamping is controlled by a first operator situated in the work cabin 14.

Every second sleeper, not yet tamped, is tamped by means of the second tamping unit 9 on the central frame part 4. This is controlled by a second operator situated in the work cabin 20. This tamping operation is carried out while the already corrected track position is retained unchanged. In this, it is of particular advantage if the distance between the two on-track undercarriages 7 adjoining the rear tamping unit 9 is as small as possible. These on-track undercarriages 7 apply pressure upon the already corrected track 2 and thus prevent the same from lifting up as a result of tamping. Additionally, a transverse displacement of the tamping units in track curves becomes unnecessary.

The track 2, completely tamped following the second tamping unit 9, is lowered at once in a controlled way by means of the immediately subsequent operation of the stabilizing units 11, and thus is stabilized.

The claims defining the invention are as follows:

1. A machine for performing a track position correction, including a multipart machine frame with which are associated a satellite frame, adjustable
5 relative to the machine frame by means of a drive and including a tamping unit and a track lifting unit, and a stabilizing unit, **characterized in that** a second tamping unit – displaceable relative to the machine frame by means of a drive – is arranged between the satellite frame and the stabilizing unit.
- 10 2. A machine according to claim 1, characterized in that the first tamping unit is associated with a first frame part, the second tamping unit is associated with a second frame part following the former, and the stabilizing unit is associated with a third frame part.
- 15 3. A machine according to one of claims 1 or 2, characterized in that a subframe connected to the second tamping unit is arranged centrally between two support frames of the central frame part, the support frames extending parallel to one another and in the longitudinal direction of the machine, wherein the subframe has a front end mobile by means of support rollers on the two
20 support frames, and a rear end mounted for displacement relative to the support frame.
4. A machine according to claim 3, characterized in that a drive connected to the subframe is equipped with a pressure roller for application to an
25 underside, spaced from the support roller in a vertical direction, of the frame part.
5. A machine for performing a track position correction, substantially as hereinbefore described with reference to what is shown in the drawings.

