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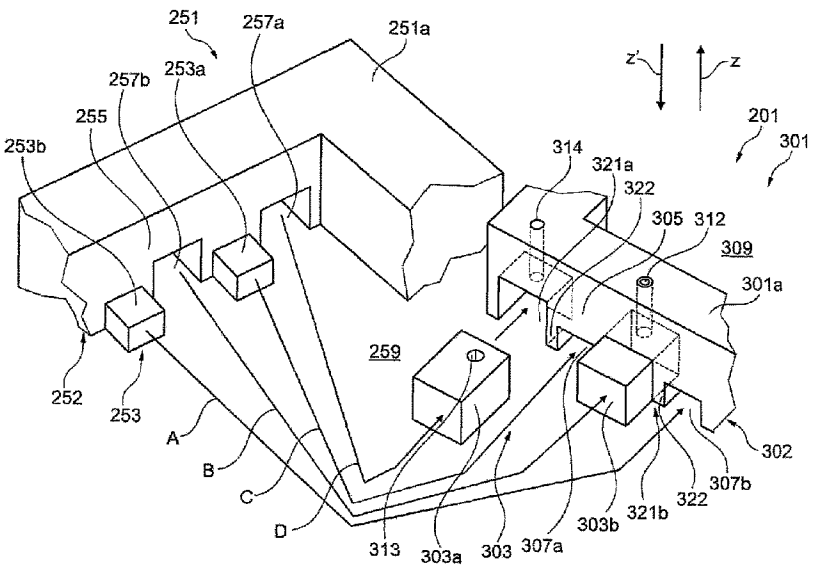

(57) **Abrégé/Abstract:**
The invention relates to a mold (201), in particular concrete mold for producing molded bodies from concrete in a molding machine. Here, a mold frame (251) comprises a frame body (251a) and at least two rows of teeth (253), wherein two of the rows of teeth (253) are formed on the frame body (251a) lying opposite one another and in each case facing a mold insert (301), here the mold insert (301) comprises an insert body (301a) and at least two rows of teeth (303), wherein two of the rows of teeth (303) are arranged on the insert body (301a) lying opposite one another and in each case facing the mold frame (251), wherein recesses (307a, 307b) are in each case formed on the insert body (301a) of the mold insert (301) between teeth (303a, 303b) of its rows of teeth (303), in which recesses teeth (253a, 253b) of the rows of teeth (253) of the frame body (251a) in each case engage in the assembled state of the mold (201), and wherein recesses (257a, 257b) are in each case formed on the frame body (251a) of the mold frame (251) between the teeth (253a, 253b) of its rows of teeth (253), in which recesses the teeth (303a, 303b) of the rows of teeth (303) of the insert body (301a) in each case engage in the assembled state of the mold (201).

Abstract:

The invention relates to a mold (201), in particular concrete mold for producing molded bodies from concrete in a molding machine. Here, a mold frame (251) comprises a frame body (251a) and at least two rows of teeth (253), wherein two of the rows of teeth (253) are formed on the frame body (251a) lying opposite one another and in each case facing a mold insert (301), here the mold insert (301) comprises an insert body (301a) and at least two rows of teeth (303), wherein two of the rows of teeth (303) are arranged on the insert body (301a) lying opposite one another and in each case facing the mold frame (251), wherein recesses (307a, 307b) are in each case formed on the insert body (301a) of the mold insert (301) between teeth (303a, 303b) of its rows of teeth (303), in which recesses teeth (253a, 253b) of the rows of teeth (253) of the frame body (251a) in each case engage in the assembled state of the mold (201), and wherein recesses (257a, 257b) are in each case formed on the frame body (251a) of the mold frame (251) between the teeth (253a, 253b) of its rows of teeth (253), in which recesses the teeth (303a, 303b) of the rows of teeth (303) of the insert body (301a) in each case engage in the assembled state of the mold (201). (Figure 10)

"Mould, in particular concrete mould"

The invention relates to a mold.

DE 42 37 788 A1 discloses a mold for producing molded bodies from concrete in a molding machine, wherein the mold comprises a mold frame and a mold insert, wherein at least one mold cavity is formed in the mold insert, and wherein the mold insert is received into a receiving space of the mold frame.

Since at the present time molded bodies made of concrete are increasingly manufactured with shorter cycle times and molded bodies which are made from concrete and have a low height are increasingly the trend, it is the object of the invention to propose a mold in which a connection between the mold frame and the mold insert has a high degree of stability and load-bearing capacity, and the mold frame and the mold insert can in particular have a low overall height.

In the case of the mold according to the invention, the mold frame comprises a frame body and at least two rows of teeth, wherein two of the rows of teeth are formed on the frame body opposite one another and in each case facing the mold insert, wherein the mold insert comprises an insert body and at least two rows of teeth, wherein two of the rows of teeth are arranged on the insert body opposite one another and in each case facing the mold frame, wherein recesses are each formed

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on the insert body of the mold insert between teeth of its rows of teeth, in which recesses teeth of the rows of teeth of the frame body in each case engage in the assembled state of the mold, and wherein recesses are in each case formed on the frame body of the mold frame between the teeth of its rows of teeth, in which recesses the teeth of the rows of teeth of the insert body in each case engage in the assembled state of the mold. Such an arrangement of the rows of teeth means that the teeth do not load one another, and therefore the mold can basically withstand higher loadings. Furthermore, it is possible for the teeth of the opposite rows of teeth to be arranged next to one another and for the overall height of mold frame and mold insert to thereby be able to be kept low.

Furthermore, it is provided that either the teeth of at least one of the rows of teeth of the mold insert and in particular all of the rows of teeth of the mold insert are releasably connected to the insert body in such a manner, and/or that the teeth of at least one of the rows of teeth of the mold frame and in particular all of the rows of teeth of the mold frame are releasably connected to the frame body, in such a manner that the mold insert which is held nondisplaceably in the mold frame can be taken out of the receiving space of the mold insert after removal of said teeth. The mold insert can thereby be mounted in a simple manner in the mold frame and removed in a simple manner from the mold frame, and therefore maintenance work can easily be carried out both to the mold frame and to the mold insert, or an exchange can be rapidly undertaken in the event of damage to the mold insert or the mold frame.

It is also provided that the teeth of adjacent rows of teeth are arranged offset with respect to one another, and that the recesses assigned to said adjacent rows of teeth are arranged offset with respect to one another. By this means, it is possible to arrange the teeth and the recesses of all of the rows of teeth on a common level and to avoid an arrangement of teeth lying above one another, and thus to achieve a lower overall height.

It is also provided to equip each removable tooth with a securing means with which the tooth is fixed on the frame body or on the insert body, wherein the securing means is designed in particular in such a manner that it either comprises a threaded pin, which is integrally formed on the tooth, and a nut or that it comprises a screw which can be inserted through a through bore or that it comprises a screw, which can be inserted through a through bore, and a nut. Securings of this type make it possible for the teeth to be rapidly and reliably mounted and removed.

Furthermore, it is provided

- that the frame body of the mold frame has a supporting surface formed from at least one surface,
- that the insert body of the mold insert has a supporting surface formed from at least one surface, and
- that at least one of the removable teeth has a lower contact surface,
- wherein the supporting surfaces of the frame body and of the insert body lie on a common plane, and wherein
- either the contact surface of the tooth likewise lies on the common plane
- or the contact surface of the tooth lies spaced apart from the common plane, and therefore a cavity is formed between the common plane and the contact surface of the tooth. By this means, in the first variant, extensive support of the teeth on a production base is possible, by means of which in particular a vibration loading of the teeth can be kept low. By this means, in the second variant, tolerance of the mold in relation to soiling forming on the teeth in the region of the securing means is ensured.

It is also provided

- that at least one of the removable teeth has an upper contact surface,
- wherein the recess formed on the frame body for the removable tooth comprises a mating contact surface,
- wherein a tooth receptacle formed on the insert body for

the removable tooth comprises a mating contact surface and wherein

- either the mating contact surface of the insert body and the mating contact surface of the frame body form a step-free bearing plane for the upper contact surface for the removable tooth and the upper contact surface of the removable tooth is divided into a frame-body contact surface and into an insert-body contact surface and these have such a difference in levels that the frame body and the insert body are braced together when the tooth is fitted,
- or the upper contact surface of the removable tooth is designed as a flat contact surface and the mating contact surface of the insert body and the mating contact surface of the frame body have such a difference in levels that the frame body and the insert body are placed together when the tooth is fitted. Such a design makes it possible to brace the mold insert and the mold frame together and thus to prevent an undesirable release, in particular of screw connections.

Furthermore, it is provided that the mold comprises cutting means, wherein the cutting means are arranged between the removable tooth and the frame body and/or the insert body and are formed in particular integrally with the removable tooth and/or the frame body and/or the insert body. By this means, an undesirable displacement of the teeth or of the insert body in relation to the frame body is more effectively avoided by an additional form fit in the production mode.

It is also provided that the mold insert or the mold frame comprises threaded bores or through bores for receiving the securing means. In such a design, the use of cost-effective standard components is possible.

Finally, it is provided that the recesses which are formed on the insert body of the mold insert between teeth of its rows of teeth and the recesses which are formed on the frame body of the mold frame between the teeth of its rows of teeth are open to a lower side of the mold. By this means, an extremely simple assembly is possible in which the rows of teeth

connected fixedly or nonreleasably to the mold insert or to the mold frame can be pushed in a single-dimensional movement into the associated recesses and in which the rows of teeth or teeth connected releasably to the mold insert or to the mold frame can subsequently likewise be inserted in in each case single-dimensional movements into the respectively associated recesses and then fixed.

According to an embodiment, there is provided a mold for producing molded bodies from concrete in a molding machine comprising

- a mold frame and a mold insert,
- wherein at least one mold cavity is formed in the mold insert,
- wherein the mold insert is received into a receiving space of the mold frame,
- wherein the mold frame comprises a frame body and at least two rows of teeth, wherein two of the rows of teeth are formed on the frame body opposite one another and in each case facing the mold insert,
- wherein the mold insert comprises an insert body and at least two rows of teeth, wherein two of the rows of teeth are arranged on the insert body opposite one another and in each case facing the mold frame,
- wherein recesses are each formed on the insert body of the mold insert between teeth of its rows of teeth, in which recesses teeth of the rows of teeth of the frame body in each case engage in the assembled state of the mold, and
- wherein recesses are in each case formed on the frame body of the mold frame between the teeth of its rows of teeth, in which recesses the teeth of the rows of teeth of the insert body in each case engage in the assembled state of the mold.

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Further details of the invention will be described in the drawing with reference to schematically illustrated exemplary embodiments.

In the drawing:

Figure 1: shows a partial view from below of a mold frame in a first variant embodiment of a mold;

Figure 2: shows a partial view from below of a mold insert of the mold, of which the mold frame is shown in figure 1;

Figure 3: shows a section through the mold frame shown in figure 1, along the section line III-III;

Figure 4: shows a section through the mold frame shown in figure 2, along the section line IV-IV;

Figure 5: shows a section through the mold frame of the mold of the first variant embodiment in the region of a releasably fastened tooth with the tooth removed;

Figure 6: shows a section through the mold frame and the mold insert of the mold of the first variant embodiment in the region of a releasably fastened tooth with the tooth removed;

Figure 7: shows a section through the mold frame and the mold insert of the mold of the first variant embodiment in the region of a releasably fastened tooth with

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the tooth fitted;

Figure 8: shows a section through the mold frame of the mold of the first variant embodiment in the region of a recess;

Figure 9: shows a section through the mold frame and the mold insert of the mold of the first variant embodiment in the region of a recess of the mold frame and of a tooth of the mold insert, and

Figure 10: shows a perspective illustration of parts of a second variant embodiment of a mold in an exploded illustration.

Figure 1 shows a partial view from below of a mold frame 51 of a first variant embodiment of a mold 1.

Figure 2 shows a partial view from below of a mold insert 101 and of an insert body 101a of the mold insert 101 of the mold 1, of which the mold frame 51 can be seen in figure 1.

In figure 1, the observer is looking at a lower side 52 of the mold frame 51 and, in figure 2, the observer is looking at a lower side 102 of the mold insert 101. Both lower sides 52, 102 form a lower side 2 of the mold 1.

Figure 3 shows a section through the mold frame 51 shown in figure 1, corresponding to the section line III-III. In the section, the lower side 52 of the mold frame 51 faces upward corresponding to the position which the mold frame 51 takes up in figure 1. The mold frame 51 comprises a frame body 51a and teeth 53a to 53c and 54a which are fitted on the latter, wherein the teeth 53a to 53c arranged on a longitudinal side 55 of the mold frame 51 or of the frame body 51a form a first row of teeth 53, and wherein the tooth 54a arranged on a transverse side 56 of the mold frame 51 is part of a second row of teeth 54. A further row of teeth is arranged on a second longitudinal side (not illustrated) lying opposite the

first longitudinal side 55. Furthermore, a further row of teeth is arranged on a second transverse side (not illustrated) lying opposite the first transverse side 56. Recesses 57a to 57d and 58a, 58b are formed between the teeth 53a to 53c and 54a.

Figure 4 shows a section through the mold insert 101 shown in figure 2, corresponding to a section line IV-IV. In the section, the lower side 102 of the mold insert 101 faces upward corresponding to the position which the mold insert 101 takes up in figure 2. Teeth 103a to 103d and 104a to 104c are formed on the mold insert 101, wherein the teeth 103a to 103d arranged on a longitudinal side 105 of the mold insert 101 form a first row of teeth 103, and wherein the teeth 104a to 104c arranged on a transverse side 106 of the mold insert 101 are part of a second row of teeth 104. A further row of teeth is arranged on a second longitudinal side (not illustrated) lying opposite the first longitudinal side 105. Furthermore, a further row of teeth is arranged on a second transverse side (not illustrated) lying opposite the first transverse side 106. Recesses 107a to 107c and 108a, 108b are formed between the teeth 103a to 103d and 104a to 104c, respectively. The mold insert 101 furthermore only partially shows mold cavities 109, denoted by reference signs, in which molded blocks made of concrete can be produced when the mold 1 is assembled and rests with its mold lower side 2 on a production base. In order to produce the molded blocks, the mold cavities 109 are then filled with liquid concrete. The latter is shaped and compressed by punches entering the mold cavities 109 and by vibrations introduced via the production bases. The mold is subsequently lifted off the production base, and therefore the molded blocks remain on the production base and can be removed.

An overall view of figures 1 and 2 and of figures 3 and 4 reveals that, in the assembled state of mold frame 51 and mold insert 101, the teeth 53a to 53c, 54a of the rows of teeth 53, 54 of the mold frame 51 engage in the recesses 107a to 107c, 108a, 108b of the mold insert 101, and the teeth 103a to 103d,

104a to 104c of the rows of teeth 103, 104 of the mold insert 101 engage in the recesses 57a to 57d, 58a, 58b of the mold frame 51. The mold insert 101 is thereby held in the mold frame 51 in such a manner that the mold insert 101 can neither be moved relative to the mold frame 51 out of the plane of the drawing nor into the plane of the drawing - when looking at figures 1 and 2. Of course, installation of the mold insert 101 shown in figure 2 into a receiving space 59 of the mold frame 51 shown in figure 1 is possible only when the teeth 53a to 53c and 54a are removed from the mold frame 51. For mounting from above in the arrow direction z', with respect to figures 3 and 4, the mold insert 101 is placed into the receiving space 59 of the mold frame 51, the lower side 52 of which faces upward. The mold frame 51 lies with an upper side 60 on a base U. After insertion, the mold insert 101 likewise lies again with an upper side 110 on said base U. Following the insertion, the teeth 53a to 53c, 54a of the mold frame 51 are then screwed to the mold frame 51 by securing means 61 which are in the form of screws 62. For this purpose, each tooth 53a to 53c, 54a of the mold frame 51 has a step-shaped through bore 63 and, for this purpose, the mold frame 51 in the region of each tooth 53a to 53c, 54a has a threaded bore 64 into which the screw 62 is screwed in the fully fitted state. In the fully fitted state, the teeth 103a to 103d, 104a to 104c of the mold insert 101 then prevent - with respect to figures 3 and 4 - the mold frame 51 from being able to be lifted upward from the mold insert 101 in the arrow direction z. In the fully fitted state, the teeth 53a to 53c, 54a of the mold frame 51 then prevent - with respect to figures 3 and 4 - the mold insert 101 from being able to be lifted upward from the mold frame 51 in the arrow direction z. By this means, the mold insert 101 is then rigidly connected to the mold frame 51. The recesses 57a to 57d, 58a, 58b of the mold frame 51 and the recesses 107a to 107c, 108a, 108b of the mold insert 101 are open to the lower side 2 of the mold. For explanatory purposes, the tooth 53c is shown in figure 2, and therefore it can be seen how the tooth 53 engages in the recess 107c and rests on the mold insert 101.

The interaction of the mold frame 51 with the mold insert 101 is explained once again with reference to figures 5 to 9. Here, the mold frame 51 and the mold insert 101 are oriented in such a manner that they rest with their lower sides 52 and 102, respectively, on the base U.

Figures 5 to 9 show diverse further sections through the mold frame 51 or through the mold frame 51 and the mold insert 101, wherein, in these illustrations, the mold frame 51 or the mold frame 51 and the mold insert 101 are shown in a position which is turned through 180° in relation to the sectional illustrations of figures 3 and 4 and in which the mold frame 51 rests with its lower side 52 on the base U or in which the mold frame 51 and the mold insert 101 rest with their lower sides 52 and 102, respectively, on the base U.

Figure 5 once again shows a section, with respect to figure 1, corresponding to the section line III-III through the mold frame 51 shown in figure 1, with the tooth 53a not being illustrated in figure 5.

Analogously to the section illustrated in figure 5, figure 6 shows a section through the mold 1 with the mold insert 101 inserted into the receiving space 59 of the mold frame 51, wherein the tooth 53a (see figure 1) is not yet fitted on the mold frame 51. The recess 107a which opens to the lower side 102 of the mold insert 101 and in which the tooth, not illustrated, can engage can be seen on the mold insert 101.

Figure 7 then shows the illustration of figure 6, wherein the tooth 53a is now fastened to the mold frame 51 by means of the screw 62 and engages in the recess 107a (see figure 6).

Figure 8 shows a further section, with respect to figure 5, through the mold frame 51 corresponding to the section line VIII-VIII which is illustrated in figure 1 and which runs in the region of the recess 57b of the mold frame 51. The recess 57b opens not only toward the mold insert 101 (see figure 9), but also toward the base U on the lower side 52 of the mold

frame 51, and therefore the mold insert 101 can be pushed from below in the arrow direction z into the receiving space 59 of the mold frame 51, or the mold frame 51 can be placed from above in arrow direction z' on the mold insert 101, before the teeth 53a to 53c, 54a are then screwed to the mold frame 51.

Analogously to figures 6 and 7, figure 9 shows the mold 1 in the region of the section illustrated in figure 8, wherein the mold insert 101 is now received in the receiving space 59 of the mold frame 1. It can be seen in this illustration how the tooth 103b of the mold insert 101 engages in the recess 57b.

Figure 10 finally shows a second variant embodiment of a mold 201. The mold 201 is illustrated in an exploded view, wherein the mold 201 comprises a mold frame 251 and a mold insert 301, and wherein the mold frame 251 is shown rotated in relation to the mold insert 301 such that a longitudinal side 255 of the mold frame 251 and a longitudinal side 305 of the mold insert 301 are readily visible. A mold cavity 309 of the mold insert 301 can likewise be seen. As indicated by the arrows A, B, C and D, the longitudinal side 255 and the longitudinal side 305 lie opposite each other in the assembled state of the mold 201, in which the mold insert 301 is placed into a receiving space 259 of the mold frame 251.

The mold frame 251 comprises teeth 253a and 253b and also recesses 257a and 257b on its longitudinal side 255. The teeth 253a, 253b are connected nonreleasably to a frame body 251a of the mold frame 251. The recesses 257a and 257b are formed on the frame body 251a and open to the longitudinal side 255 and to a lower side 252 of the mold frame 251. Since the frame body 251a annularly encircles the receiving space and a further longitudinal side (not illustrated) of the mold frame 251 lying opposite the longitudinal side 255 of the mold frame 251 is formed comparably to the longitudinal side 255, the arrows A to D do not symbolize pushing together, but merely indicate the manner in which the mold frame 251 and the mold insert 301 interact in the fully assembled state of the mold 201. The mounting or the assembly of the mold 201 is explained

in more detail further below. A further longitudinal side (not illustrated) of the mold insert 301 that lies opposite the longitudinal side 305 of the cuboidal mold insert 301 is formed comparably to the longitudinal side 305 and interacts correspondingly with the longitudinal side (not illustrated) of the mold frame 201. Optionally, as shown in the first variant embodiment, rows of teeth and recesses can be provided on one or on both transverse sides of the mold frame and of the mold insert, and therefore the mold insert is held not only on two opposite sides, but on a total of three sides or four sides in a form-fitting manner in the mold frame.

For the mounting, teeth 303a, 303b which can be screwed to an insert body 301a of the mold insert 301 are removed therefrom and the insert body 301a is placed from above in arrow direction z' into the receiving space 259 of the mold frame 251, wherein the longitudinal side 305 of the mold insert 301 is oriented here parallel to the longitudinal side 255 of the mold frame 251. During the insertion, the teeth 253a, 253b are then received by recesses 307a, 307b which are open to the longitudinal side 305 and to a lower side 302 of the mold insert 301. Subsequently, the teeth 303a, 303b of the mold insert 301 are inserted from below into the recesses 257a, 257b of the mold frame 251 and into tooth receptacles 321a, 321b of the mold insert 301, said tooth receptacles corresponding to said recesses and being formed in the insert body 301a. In the fully fitted state, the teeth 303a, 303b are screwed to the insert body 301a with screws 312 which are each inserted from below in arrow direction z into a through bore 313 of the teeth 303a, 303b and are screwed into threaded bores 314 which are formed in the insert body 301a. Accordingly, in the fully mounted state of the mold 201, a row of teeth 253 of the mold frame 251 and a row of teeth 303 of the mold insert 301 then lie offset opposite one another.

According to a variant embodiment, it is also provided that the tooth receptacles 321a, 321b and the recesses 307a, 307b merge directly into one another and the separating webs 322 shown in figure 10 are omitted. In such an embodiment, it can

also be provided that the teeth of the mold insert and the teeth of the mold frame are dimensioned in such a manner that they lie laterally against one another in the fully mounted state of the mold.

List of reference signs:

1	Mold
2	Lower side of the mold
5	
51	Mold frame
51a	Frame body
52	Lower side
53	Row of teeth
53a - 53c	Tooth
54	Row of teeth
54a	Tooth
55	Longitudinal side
56	Transverse side
57a - 57d	Recess
58a, 58b	Recess
59	Receiving space
60	Upper side
61	Securing means
62	Screw
63	Through bore
64	Threaded bore
101	Mold insert
101a	Insert body
102	Lower side
103	Row of teeth
103a - 103d	Tooth
104	Row of teeth
104a - 104c	Tooth
105	Longitudinal side
106	Transverse side
107a - 107c	Recess
108a, 108b	Recess
109	Mold cavity
110	Upper side
201	Mold

251	Mold frame
251a	Frame body
253	Row of teeth
253a, 253b	Tooth
255	Longitudinal side
257a, 257b	Recess
259	Receiving space
301	Mold insert
301a	Insert body
303	Row of teeth
305	Longitudinal side
309	Mold cavity
303a, 303b	Tooth
307a, 307b	Recess
312	Screw
313	Through bore
314	Threaded bore
321a, 321b	Tooth receptacle
z, z'	Arrow direction
A-D	Arrow

CLAIMS:

1. A mold for producing molded bodies from concrete in a molding machine comprising

- a mold frame and a mold insert,
- wherein at least one mold cavity is formed in the mold insert,
- wherein the mold insert is received into a receiving space of the mold frame,
- wherein the mold frame comprises a frame body and at least two rows of teeth, wherein two of the rows of teeth are formed on the frame body opposite one another and in each case facing the mold insert,
- wherein the mold insert comprises an insert body and at least two rows of teeth, wherein two of the rows of teeth are arranged on the insert body opposite one another and in each case facing the mold frame,
- wherein recesses are each formed on the insert body of the mold insert between teeth of its rows of teeth, in which recesses teeth of the rows of teeth of the frame body in each case engage in the assembled state of the mold, and
- wherein recesses are in each case formed on the frame body of the mold frame between the teeth of its rows of teeth, in which recesses the teeth of the rows of teeth of the insert body in each case engage in the assembled state of the mold.

2. The mold as claimed in claim 1, wherein either the teeth of at least one of the rows of teeth of the mold insert are releasably connected to the insert body in such a manner that the mold insert which is held nondisplaceably in the mold frame can be taken out of the receiving space of the mold insert after removal of said teeth.

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3. The mold as claimed in claim 2, wherein all of the rows of the teeth of the mold insert are releasably connected to the insert body.

4. The mold as claimed in any one of claims 1 to 3, wherein the teeth of at least one of the rows of teeth of the mold frame are releasably connected to the frame body, in such a manner that the mold insert which is held nondisplaceably in the mold frame can be taken out of the receiving space of the mold insert after removal of said teeth.

5. The mold as claimed in claim 4, wherein all of the rows of teeth of the mold frame are releasably connected to the frame body.

6. The mold as claimed in any one of claims 1 to 5, wherein the teeth of adjacent rows of teeth are arranged offset with respect to one another, and wherein the recesses assigned to said adjacent rows of teeth are arranged offset with respect to one another.

7. The mold as claimed in any one of claims 2 to 6, wherein each releasably connected tooth comprises a securing means with which the tooth is fixed on the frame body or on the insert body.

8. The mold as claimed in claim 7, wherein the securing means is designed in such a manner that it either comprises a threaded pin, which is integrally formed on the tooth, and a nut or that it comprises a screw which can be inserted through a through bore or that it comprises a screw, which can be inserted through a through bore, and a nut.

9. The mold as claimed in any one of claims 1 to 8,

- wherein the frame body of the mold frame has a supporting

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surface formed from at least one surface,

- wherein the insert body of the mold insert has a supporting surface formed from at least one surface, and
- wherein at least one of the removable teeth has a lower contact surface,
- wherein the supporting surfaces of the frame body and of the insert body lie on a common plane, and wherein
- either the contact surface of the tooth likewise lies on the common plane
- or the contact surface of the tooth lies spaced apart from the common plane, and therefore a cavity is formed between the common plane and the contact surface of the tooth.

10. The mold as claimed in any one of claims 1 to 9,

- wherein at least one of the releasably connected teeth has an upper contact surface,
- wherein the recess formed on the frame body for the removable tooth comprises a mating contact surface,
- wherein a tooth receptacle formed on the insert body for the removable tooth comprises a mating contact surface and wherein
- either the mating contact surface of the insert body and the mating contact surface of the frame body form a step-free bearing plane for the upper contact surface of the removable tooth and the upper contact surface of the removable tooth is divided into a frame-body contact surface and into an insert-body contact surface and these have such a difference in levels that the frame body and the insert body are braced together when the tooth is fitted,
- or the upper contact surface of the removable tooth is designed as a flat contact surface and the mating contact surface of the insert body and the mating contact surface

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of the frame body have such a difference in levels that the frame body and the insert body are placed together when the tooth is fitted.

11. The mold as claimed in any one of claims 1 to 10, wherein the mold comprises cutting means, wherein the cutting means are arranged between at least one of the releasably connected tooth, the frame body and the insert body and are formed with at least one of the removable tooth, the frame body and the insert body.

12. The mold as claimed in claim 11, wherein the cutting means are formed integrally with at least one of the removable tooth, the frame body and the insert body.

13. The mold as claimed in any one of claims 1 to 12, wherein the mold insert or the mold frame comprises threaded bores or through bores for receiving the securing means.

14. The mold as claimed in any one of claims 1 to 13, wherein the recesses which are formed on the insert body of the mold insert between teeth of its rows of teeth and the recesses which are formed on the frame body of the mold frame between the teeth of its rows of teeth are open to a lower side of the mold.

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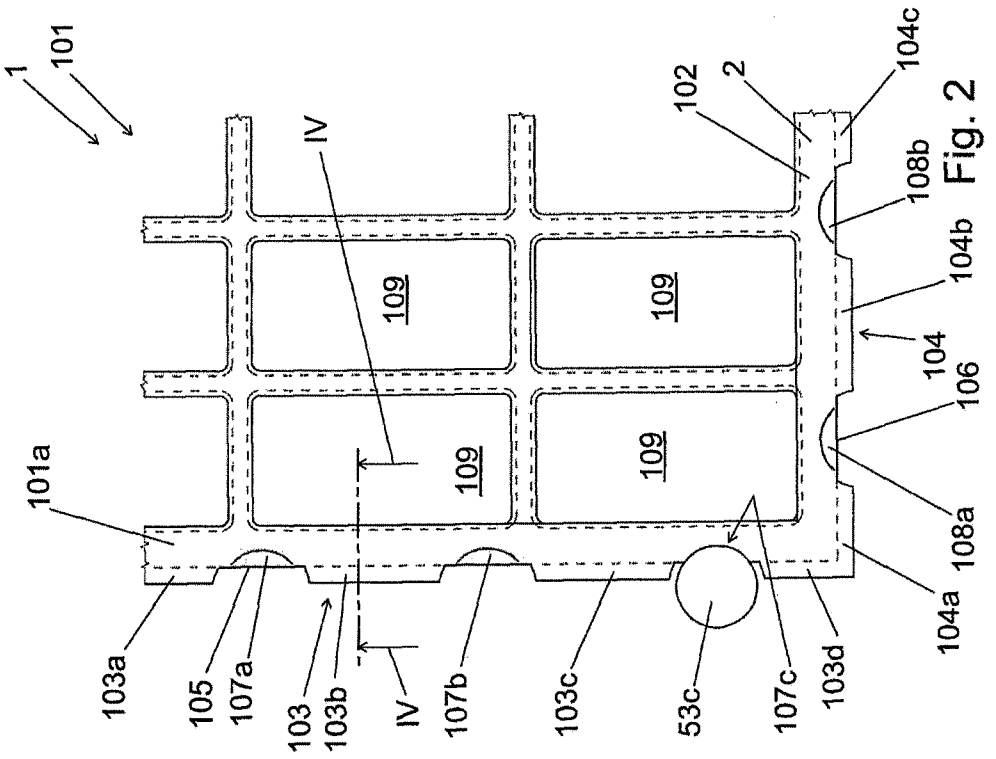

Fig. 2

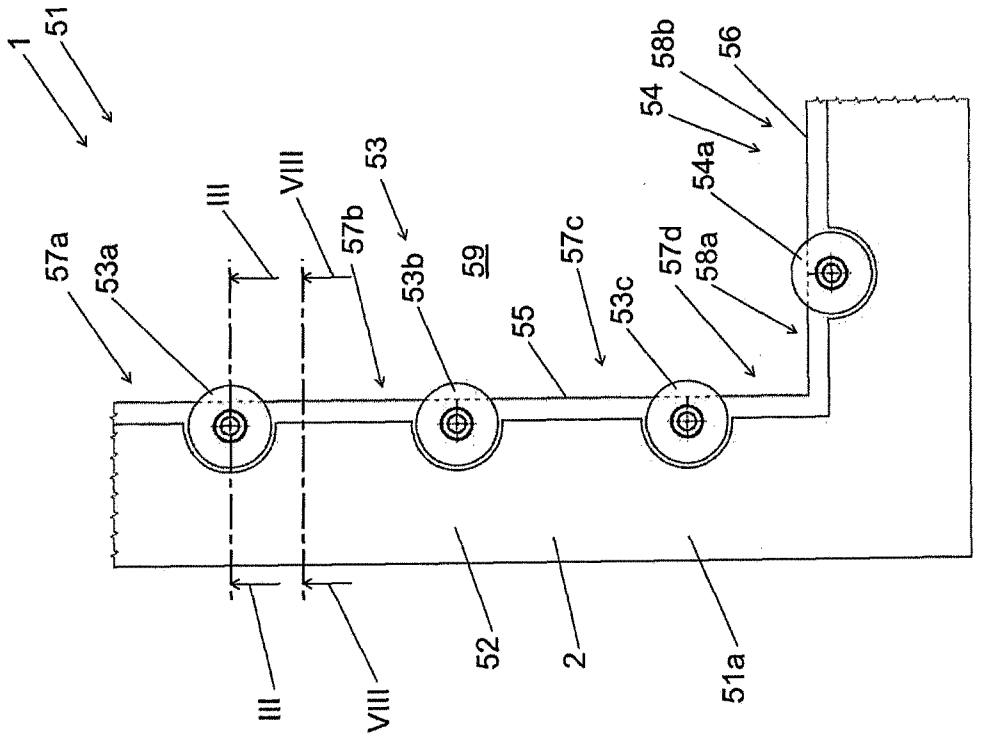

Fig. 1

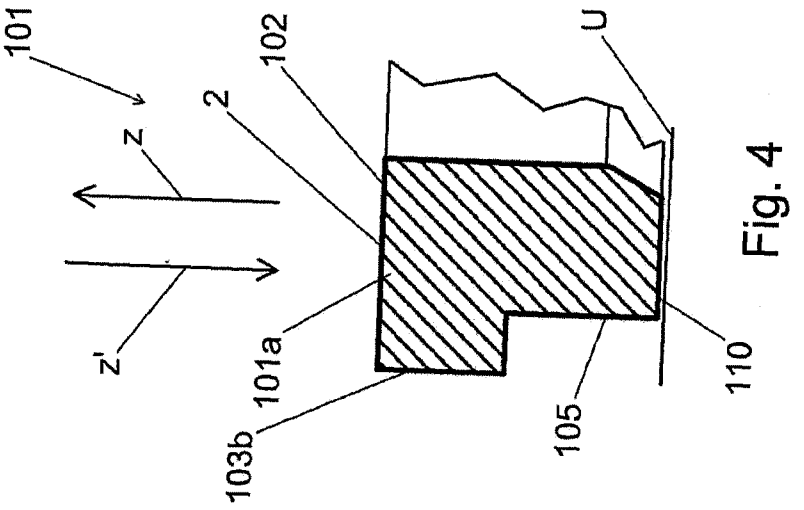
101
z
z'
2
102
U
101a
103b
105
110

Fig. 4

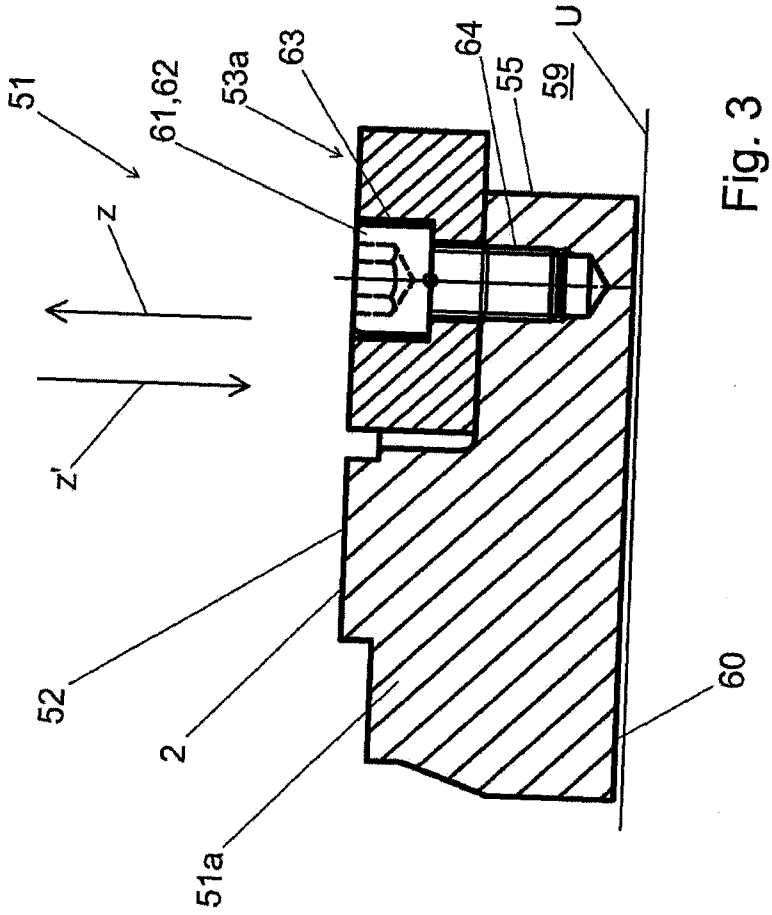
51
z
z'
61,62
53a
63
64
55
59
U
52
2
51a
60

Fig. 3

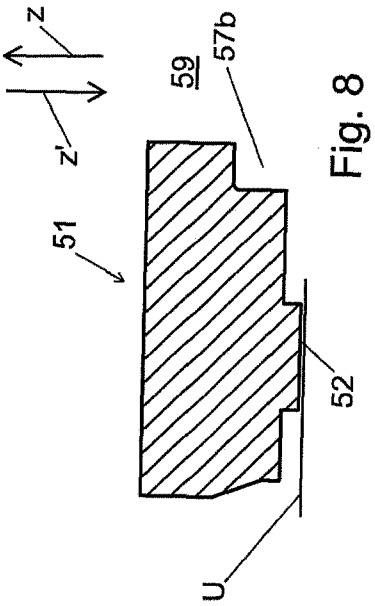

Fig. 8

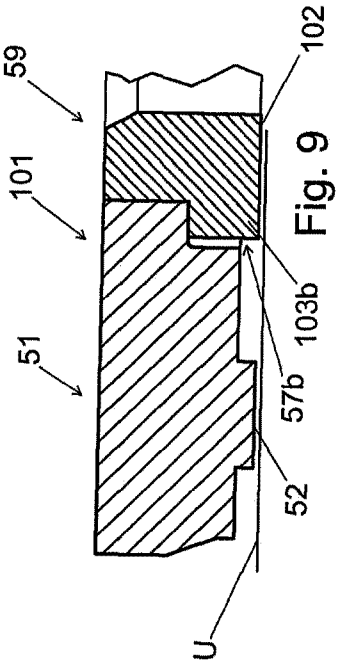

Fig. 9

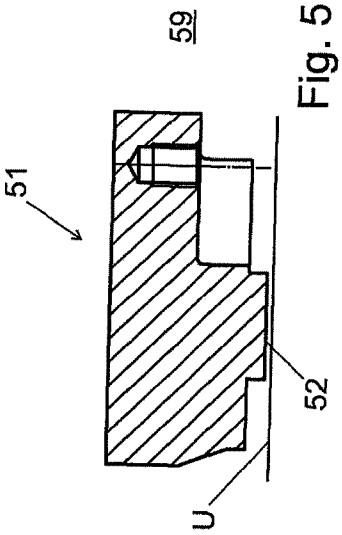

Fig. 5

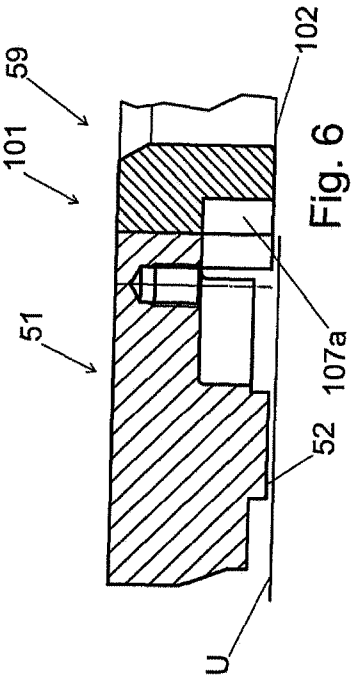

Fig. 6

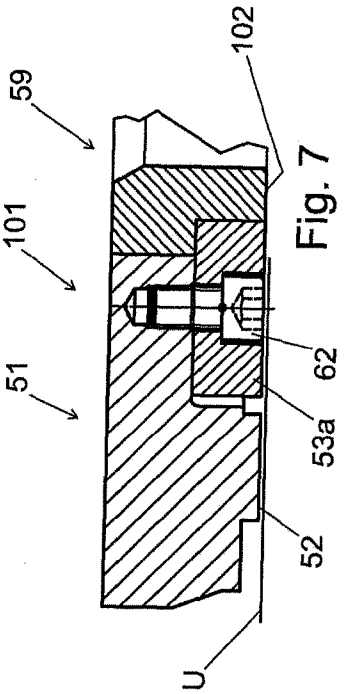

Fig. 7

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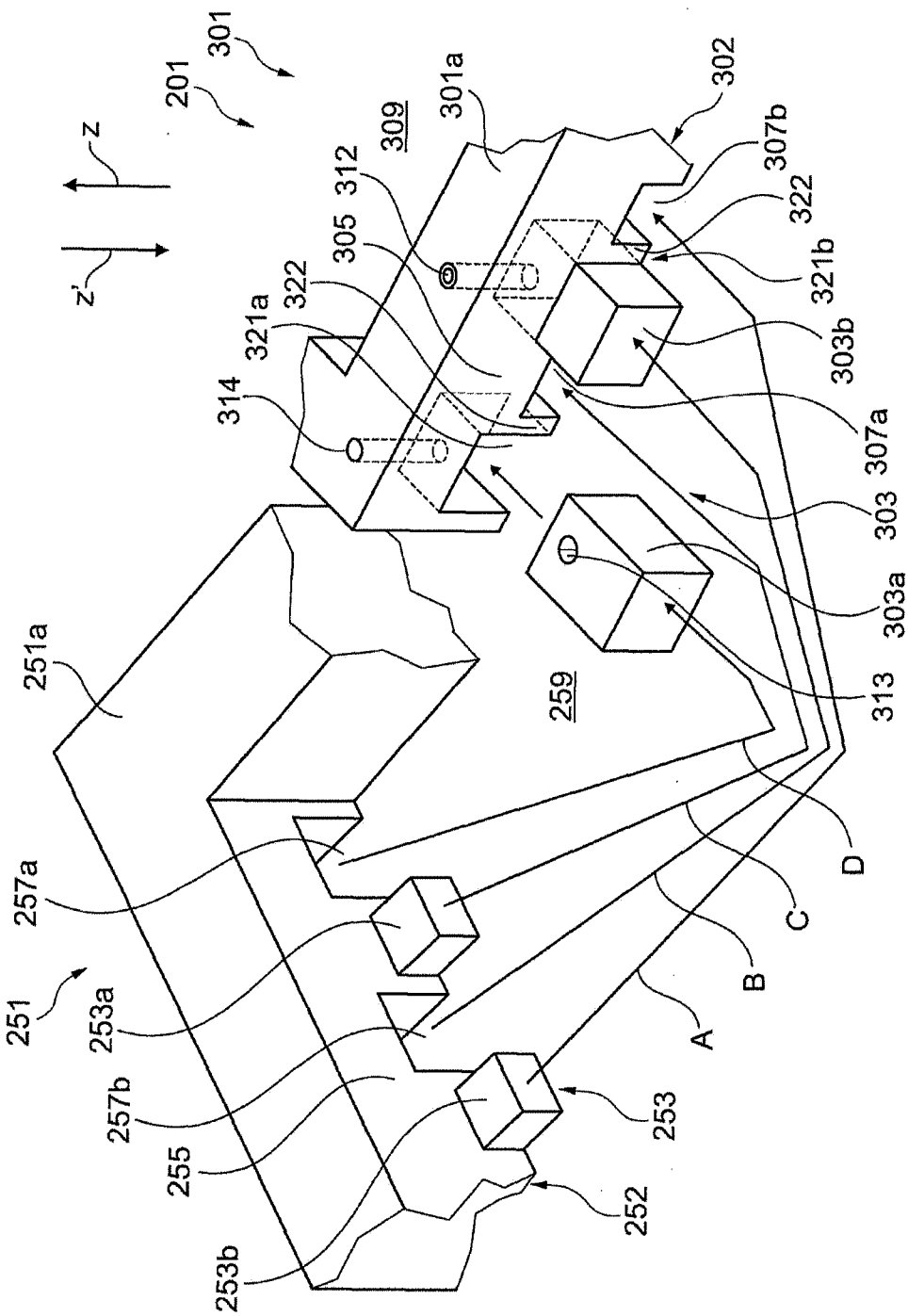
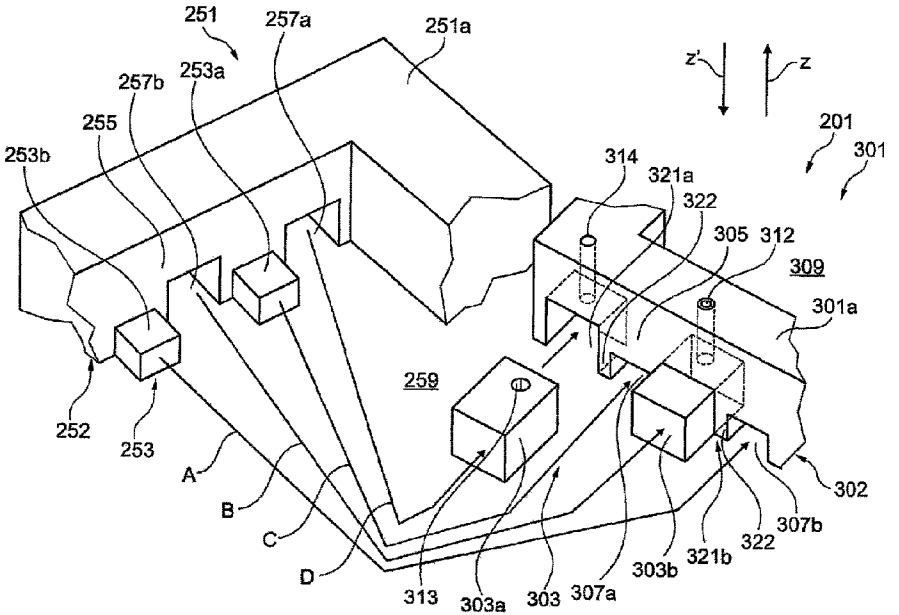


Fig. 10


251
257a
251a
257b
253a
255
253b
z'
z
201
301
314
321a
322
305
312
309
301a
259
252
253
A
B
C
D
313
303a
303
307a
303b
321b
322
307b
302