IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ATTY.'S DOCKET: STEHR=4

In re Application of:	)	Art Unit: 3206
STEHR et al	)	Examiner: F. CHIN
Serial No.: 07/910,926	)	Washington, D.C.
Filed: July 9, 1992	)	April 16, 1993
For: AGITATOR MILL	)	

REQUEST FOR WITHDRAWAL OF FINALITY OF OFFICIAL ACTION OR PETITION IN LIEU THEREOF

Honorable Commissioner of Patents and Trademarks
Washington, D.C. 20231

Sir:

Applicant hereby requests withdrawal of the Finality of the April 5, 1993, Official Action on the basis that such finality is premature. If the Examiner refuses, it is requested that this be treated as a Petition[1].

In the first Official Action on October 1, 1992, the Examiner failed to indicate and provide grounds on the merits for the rejection of claim 14. The Examiner did however, indicate on the face sheet of the Action that claims 1 - 15 were rejected. But because claim 14 was not included in the statement of any rejection, Applicants had even reason to believe that claim 14 was not rejected.

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[1] This would be a no-fee petition.

Section 706.07, "Final Rejection" of the MPEP, indicates that:

> In making the Final Rejection, all outstanding grounds of rejection of record should be carefully reviewed, and any such grounds relied on in the Final Rejection should be reiterated.
> (underlining added).

Further, section 706.07(a), "Final Rejection, When Proper on Second Action", indicates that:

> ... second ... actions on the merits shall be final, except where the Examiner introduces a new ground of rejection not necessitated, by amendment ... by applicant ... .
> (underlining added).

From the above it is clear that the Examiner's Final Action does not reiterate grounds of rejection of claim 14 on the merits, of record, and indeed, introduces a new ground of rejection of this claim not previously made and not necessitated by Applicant's amendments; this precludes a Final Action as set out in the above cited MPEP sections. Applicant respectfully submits that these facts are not even disputable because no grounds of rejection on the merits of claim 14 were set out in the first Official Action.

In addressing this matter in his Final Official Action, the Examiner brushes aside the fact that no grounds of

rejection on the merits are provided for claim 14 on the basis that:

1. failure to indicate rejection of the claim was a typographical error,

2. that page 1 (the face sheet) indicates that claim 14 was rejected and

3. that during a January 29, 1993, (after the original due date) oral interview it was explained that paragraph 4 of paper should have read "claims 2, 4 - 12, 14 and 15 are rejected ..."

None of the above stated reasons justifies ignoring the limitations on final rejections imposed by the above quoted sections.

First, the Examiner's admission of a typographical error of not including a rejection of claim 14 on the merits within the body of the rejection only reinforces that there were no grounds of rejection of claim 14 on the merits which could be reiterated in the final rejection,

Second, page 1 does not indicate that claim 14 was rejected. It indicates that claims 1 - 15 were rejected which obscures a definitive rejection of claim 14 as suggested by the

Examiner. Further, even if one assumes that claim 14 was intended to be rejected, the face page does not give a hint as to which group of rejected claims it belongs and, therefore, the grounds to be applied against claim 14, i.e. claims 1, 3 and 15 or claims 2, 4 - 12 and 15, 16.

In this regard, section 706.07 further indicates that:

> Before final rejection is in order a clear issue should be developed between the examiner and applicant. To bring the prosecution to as speedy conclusion as possible and at the same time to deal justly by both the applicant and the public, the invention as disclosed and claimed should be thoroughly searched in the first action and the references fully applied; ...
> (underlining added)

Applicant again respectfully submits that there is no way of reviewing the first Official Action and conclusively determining whether claim 14 was rejected and, if rejected, the grounds of rejection on the merits, i.e. the references cited against such claim.

Third, Applicants object to the Examiner's use of the February 2, 1993, Examiner's Interview Summary Record to supplement and explain the Examiner's First Official Action. Applicant is unaware of any Patent Office policy that permits an Examiner to supplement an Official Action by selecting parts of an oral conversation to which the Examiner was not privy, i.e. the conversation was not with the Examiner of record, but

instead was with another person who would not know (or tell Applicants) how claim 14 was supposed to have been rejected..

Further, the Summary Record is dated February 2, 1993, one day after Applicant submitted its February 1, 1993, Response and such Summary Record was therefore not in Applicant's possession when responding. If this Record was before Applicant at the time of response the undersigned would have pointed out that it is incorrect on its face. At no time did the undersigned indicate that the failure to include claim 14 in the body of the rejection was an "obvious error". The only person who could conclusively establish it as being an "obvious error" was the Examiner who produced the first Official Action, who was unavailable at the time of the interview. The undersigned could only conjecture whether failure to address claim 14 was an error or was intended.

Indeed, the January 29, 1993 call from the undersigned was prompted to clarify inconsistencies in the total record created by the Examiner and instructions from Applicants to accept the allowance of claim 14. Unfortunately, neither the Examiner or the Supervisory responsible for the first action was available and the person who took the call could only speculate on the Examiner's initial intent. In this regard, see page 2 of the February 2, 1993, Record where the it is indicated, "It seems clear that ..." Also note the statement on page 1 that "Agreement was not reached". Further, there is no indication as

to any agreement on any matter discussed. Further, the Summary Record's indication of what the merits of the rejection of claim 14 were, was not to the undersigned's recollection discussed or a matter of interest to the undersigned after determining that Examiner Chin was unavailable. Indeed, after the undersigned determined that neither Examiner indicated as being responsible for the first Official Action was available, which ruled out a substantive opinion, the undersigned's only interest was an extension of time. The February 2, 1993 Record indicates that this request was denied.

Given that there was no agreement on any matter, the Record has no probative value and even if it could be construed to be accurate (which it is not) it was made part of the Record long after the date of the First Official Action and Applicant's February 1, 1993, Response to the action.

Applicants respectfully submit that the Examiner's April 5, 1993, Final Official Action is premature and is clearly not supported because claim 14 was not rejected on its merits in the first Official Action; and "to deal justly" with Applicants within the intent of Section 706.07, it is inappropriate to suggest that Applicants should have known that the Examiner had made a serious error and having conjectured that there was an error, then should have speculated what the grounds of rejection were intended to be and then, thereafter, responded to the intended (but unstated) ground of rejection. The fact is the

Examiner's error precluded Applicants from responding to the undocumented rejection and, therefore, made the Final Action in question premature within PTO rules.

Applicants further respectfully submits that it is improper to penalize an Applicant for his attempt to clarify the Examiner's error by suggesting that the attempt to obtain clarification acted as notice of the Examiner's error. Indeed, if the person who produced the February 2, 1993, Summary Record was convinced there was an error, it is suggested that the proper course of action would have been to withdraw the action and reissue it with a new starting date or to have granted the Request for a free extension of time.

Respectfully submitted,

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

ATTY.'S DOCKET: OLSSON=8

In re Application of:	)	Art Unit: 3744
Lennart OLSSON	)	Examiner: W. TAPOLCAI
Appln. No.: 09/236,343	)	Washington, D.C.
Filed: January 25, 1999	)	October 23, 2000
For: APPARATUS FOR FREEZING	)	

BRIEF ON BEHALF OF APPELLANT

Honorable Commissioner for Patents
Washington, D.C. 20231

Sir:

The present appeal is taken from the Examiner's August 23, 2000, Action in finally rejecting claims 1-20. A clean copy of these claims, double spaced, appears in Appendix I to this Brief.

STATUS OF CLAIMS

The Examiner's Office Action summary indicates that claims 1-20 are rejected. However, the Examiner's 35 U.S.C. § 112, first paragraph detailed rejection on page 1 of the August 22, 2000, Office Action, which is the only rejection of the claims, is limited to rejection of claims 1-7 and 10-20.

Claims 8 and 9 had been withdrawn from consideration in prior Office Actions as being directed to the non-elected species of Figs. 4-6 and have not been otherwise addressed or rejected by the Examiner under 35 U.S.C. § 102, 103 or 112.

Appellants' appeal is directed to all of claims 1-20 on the basis that claim 1, which has been allowed along with claims 2-7 and 10-20 subject only to the above note 35 U.S.C. § 112, first paragraph rejection, is generic to non-elected claims 8 and 9.

STATUS OF AMENDMENTS

No amendments have been filed subsequent to the August 22, 2000, Final Action. However, Appellant had made amendments to the specification and drawings in its August 11, 1999, response to the Examiner's First Office Action on May 13, 1999, to which the Examiner did not object to in his November 19, 1999, Final Office Action, later withdrawn. The amendments made on page 4, line 36, page 5, line 1, and the drawings are submitted to have been entered absent any objection by the Examiner but are not acknowledged in the Examiner's quote of these sentences in his August 23, 2000, Final Action. Appellant discusses this further below.

SUMMARY OF THE INVENTION

The invention is directed to a tray (1, 31 shown in Figs. 1 and 4) designed to receive food products for freezing while traveling together with other identical trays as a conveyor belt 8 between two rollers 11, 12 through an insulated housing 15 where cold air jets for freezing are discharged on trays 1 (shown in combination in Figs. 2 and 3).

Each tray (1, 31) consists of a plurality of elements (23; 9; 22, 23) which form when juxtaposed together by push rod 13 (see Fig. 2) an upper surface area (4; 31 shown in Figs. 1 and 4) to carry the food product for freezing. Each of the elements (2, 3; 9; 22, 23) are moveable relative to each other beyond brake block 14 as they move around roller 12 so as to disengage the food product frozen in the trays as the conveyor belt 8 of trays 1 moves between rollers 11 and 12 and unloads the disengaged food product onto belt conveyors 16 and 17.

As made clear from Figs. 1, 2 and page 4, line 36, page 5, line 1 as amended in Appellant's August 11, 1999 response, elements 9 which comprise elements 2 and 3 make contact with each other to form horizontal and assembled trays 1 having a surface area 4 on the upper side of each assembled tray 1. Thus each assembled tray 1 is continuous and unbroken, i.e., tight, such that the cavities 5 can hold a liquid food

product that has been poured into them (while moving in path A), (see page 4, lines 16-23 of the specification).

When moving in path A, the temperatures of the assembled trays is kept low so that a crust of frozen product is immediately formed when the liquid food product is poured into the trays at the supply end 18. The food product in the trays is fully frozen while the trays 1 move to discharge end 19, (roller 12). (See page 5, lines 22-29 of the specification).

When the frozen products in the trays arrive at roller 12, they are removed from the conveyor belt substantially without change of orientation as the elements 9 making up assembled tray 1 move relative to one another around the roller 12 and open each tray.

To further assist in understanding the claimed invention, Applicant has enclosed herewith as Appendix II, drawing sketches 1-4 previously submitted with Appellant's January 5, 2000, response for explanatory purposes only.

The element numbers on sheets 1-4 correspond directly to the labeled elements of current Figs. 1-3, the latter of which constitute original subject matter which is not "new matter".

Attached Sheet 1 shows an enlarged perspective view of a portion of the conveyor belt 8 of Figs. 2 and 3 along path

A showing the trays assembled by push rod 13 according to the invention.

Attached Sheet 2 shows an enlarged perspective view of most of the elements of one assembled tray of the conveyor belt of Figs. 2 and 3 as it turns and opens beyond brake block 14.

Attached Sheet 3 shows an enlarged perspective view of most of the elements of one fully assembled tray as it moves along path B shown in Fig. 2 toward push rod 13.

Attached Sheet 4 shows the two parallel rails referenced on page 4, lines 24-28.

As made clear from Fig. 1, and attached sheets 1 and 2, elements 9 (comprising elements 2 and 3 in the order shown) make contact with each other with the assistance of push rod 13 to form horizontal and assembled trays 1 having a surface area 4 on the upper side of each assembled tray 1 and downwardly directed recesses 6 so that elements 2 and 3 (forming trays) can be supported and moved along two parallel rails (see page 4, lines 24-28 and sheet 4) extending transversely to the longitudinal direction of the trays. Thus, as indicated each assembled tray 1 is continuous and unbroken, such that the cavities 5 can hold a liquid food product that has been poured into them (while moving in path A) for freezing.

ISSUES

The issues on appeal are as follows:

1. Whether the Examiner was correct in rejecting claims 1-7 and 10-20 under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, on with which it is mostly nearly connected, to make and/or use the invention.

2. Whether the Examiner was corrected in rejecting claims 1-20 on the Office Action Summary.

3. Whether the Examiner was correct in failing to address the patentability of claims 8 and 9.

GROUPING OF CLAIMS

The rejection under 35 U.S.C. § 112 is limited to claims 1-7 and 10-16. Accordingly, Appellant believe that these claims as a group stand or fall together. Since claim 1 has been allowed, along with claims 2-7 and 10-20, and is generic to claims 8 and 9 which have not been rejected on any ground, Appellant submits that claims 8 and 9 do not stand or fall with claims 1-7 and 10-16 and that claims 1, 8 and 9, as a group, are separably patentable.

A R G U M E N T

With regard to issue 1 above, Appellant's position is as follows:

The Examiner's August 23, 2000, Final Office Action, is directed solely to rejections of the claims 1-7 and 10-20 under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, to make and/or use the invention. The Examiner supports this rejection specifically on the basis that the specification does not make clear that the individual plate elements 2 and 3 of tray 1 are hinged together so that they can fold together and apart or that elements 2 and 3 of Fig. 1 are equivalent elements.

The Examiner supports this rejection on the basis of the following statements:

> The specification is non-enabling with respect to how the individual tray 1 is incorporated into the belt conveyor 7 of Fig. 2. In particular, it is not clear that the individual plate elements 2 and 3 of the tray 1 are hinged together so that they can fold together and apart. It is not clear from the disclosure as

originally filed that the elements 2 and 3 correspond to the elements 9 that make up the conveyor belt 7, 8 of Fig. 2. The tray 1 as shown in Fig. 1 appears to depict a tray composed of individual plate elements 2 and 3 that are permanently bonded together to form a tray with pockets that hold food elements to be frozen. There is no clear disclosure from either the specification or drawings that the plate elements 2 and 3 are to be folded together and apart like an accordion."

The Examiner continues by indicating that:

"It is not all apparent from the specification that elements 2 and 3 of Fig. 1 and element 9 of Fig. 2 are equivalent elements. Lines 6 and 7 of page 4 clearly state that Fig. 2 is a side view of the belt conveyor comprising a plurality of trays "...according to Fig. 1...". This means in plain English that the trays as shown in Fig. 1 are somehow incorporated into

the belt conveyor of Fig. 2.

Furthermore, in line 35 of page 4 to line 2 of page 5, it is stated that "...the conveyor belt 8 thus may consist of...a plurality of trays 1, which are interconnected in the same manner as they elements 2 and 3 (the specification as originally filed), of which they are each made up." Here again, the specification as originally filed makes it clear that the belt conveyor of Fig. 2 is comprised of the trays 1 of Fig. 1. The fair reading of the specification at this point is that the trays 1 of Fig.1 are to be somehow incorporated into the belt conveyor of Fig. 2, and most definitely not that the elements 9 of Fig. 2 are merely equivalent structural elements of the trays 1 of Fig. 1."

Appellant respectfully traverses this rejection especially in indicating that elements 2 and 3 are "permanently bonded together" and that there is "no clear disclosure" that elements 2 and 3 are intended to be hinged together in the manner shown for the elements 9 of Fig. 2. While Applicant

agrees that the disclosure clearly provides that trays 1 make up the conveyor belt 8, this is not inconsistent with the elements of the trays being movable relative to one another. Applicant respectfully submits that the Examiner's comment that the trays are "permanently bounded together" is not accurate or supported by the specification and is directly refutable by the disclosure, including the original claims.

Applicant's position, is based in part from the following passage from the MPEP.

Section 2164 MPEP

> "...when the subject matter is not in the specification portion of the application as filed but is in the claims, the limitation in and or itself may enable one skilled in the art to make used the claim containing limitation."

Claim 1 reads as follows:

An apparatus for freezing of a food product by contacting a surface area (4; 31) of chilled tray (1), characterized in that they tray (1) consists of a plurality of elements (2, 3; 9; 22, 23), which are juxtaposed to form a surface area (4; 31), said elements being movable relative to each other to change a relative position of at least one element at a time...

Appellant notes here that the colons (;) shown in claim 1 are used as they are conventionally defined in the dictionary to separate groups of numbers referring to different things. Accordingly, for purposes of further discussion, Appellants maintains that the claim clearly separates elements 2, 3, from elements 9 (and also elements 22, 23 withdrawn from consideration as a non-elected species), and further, establishes that while elements 2, 3 may be different from elements 9 (and also 22, 23), the numbers represent equivalent elements and are clearly defined and claimed as such.

Claim 1 further establishes that a plurality of either elements 2, 3 or elements 9 form a surface area 4 and that each plurality of elements 2, 3 or elements 9 are movable relative to each other for changing the relative position of at least one element at a time.

Appellant further notes that claim 1 in no way is limited to "hinges" to move the elements relative to each other. This is clear as the elements noted as being movable relative to each other are shown in both the elected species of Figs. 1-3 i.e. 2, 3; 9 and the non-elected species of Figs. 4-6, i.e. elements 22, 23.

While there is nothing whatsoever in the disclosure supporting the Examiner's contention that elements 2 and 3 are bonded together there are numerous generic passages supporting

their movability set out in claim 1 and the specification inconsistent with the idea that elements 2 and 3 are bonded together. Some examples follow hereinafter:

Page 2, lines 4-6 indicates that:

"By dividing, according to the invention, the tray into a plurality of elements, which are juxtaposed and besides movable relative to each other, it will be possible to remove a frozen food product from the tray..."

The generic identification of a plurality of elements discussed above is clearly the elements of claim 1, i.e. elements 2, 3 and elements 9 (and also elements 22, 23 withdrawn from consideration).

Further, on page 2, line 30 on into page 3:

"In a preferred embodiment, the elements are elongate and, besides, the tray can advantageously be part of a conveyor belt, the longitudinal direction of the elements preferably extending transversely of the longitudinal direction of the conveyor belt. The conveyor belt thus comprises a row of successively arranged trays, which can

be connected to each other by means of their neighboring elements in the same manner as the elements in each pair of adjoining elements in a tray are connected to each other." (emphasis added)

Here again, elements discussed above clearly include at least elements 2, 3 and 9 as described in claim 1, all of which are defined as movable relative to one another.

Page 3, lines 3 and 4 further discusses "relative movability between the elements" which are clearly directed to the elements of claim 1.

Even more in point, Fig. 1 is described "as a first embodiment of a tray according to the invention" (which tray has elements movable relative to one another as indicated above) and Fig. 2 "a belt conveyor comprising a plurality of trays according to Fig. 1. The description of Figs. 1 and Fig. 2 establishes conclusively not only that the plurality of trays shown in Fig. 2 are made up of the tray of Fig. 1 but that the tray of Fig. 1 has elements 2, 3 or 9 that are movable relative to each other as shown in Fig. 2. These figures in themselves, as described, eliminate any possibility that elements 2 and 3 are bonded together.

Finally, Page 4, lines 29-35 establish that the plurality of elements 9 are interconnected by means of hinges on their longitudinal edges.

Since all the passages listed above support Appellant's contention of the equivalence of elements 2, 3 and elements 9 within claim 1, it is submitted that the skilled artisan would know without undue experimentation (or any experimentation for that matter) that elements 2 and 3 are made movable relative to each other (movability conclusively established above) by conventional structure equivalent to that described for elements 9 and as shown in Fig. 2, which as noted, describe "a belt conveyor comprising a plurality of trays according to Fig. 1."

The fact that Fig. 1 does not show the hinges in Fig. 2 does not at all, in Appellant's view, preclude the skilled artisan from providing conventional structure without the use of undue experimentation to permit the movement between elements 2 and 3 which, as noted, is conclusively called for by the claims and by the passages from the disclosure noted above.

As noted above, claim 1 does not limit producing the movement between elements 2, 3 and elements 9 to the use of hinges as suggested by the Examiner so that the elements can fold like an "accordion" (the embodiment of Figs. 4-6 withdrawn from consideration clearly has no hinges nor does it fold like

an "accordion"). Since the claims does not call for "hinges" their presence in Fig. 1 is irrelevant especially since Figs. 2 and 4-6 clearly show different means for providing movablity between the elements of claim 1 one of which are the hinges of Fig. 2. Appellant also notes that the movability between elements 22 and 23 shown in Figs. 4-6 further support the movability between elements 2 and 3 in Fig. 1 as all the elements included by element number in claim 1 are indicated to be movable relative to one another.

Further, presuming *arguendo* that the Examiner is correct in maintaining elements 2 and 3 are permanently bonded together to form a tray (not admitted, supported by the disclosure or proven), the structure will result in a nonoperative device. Since the description of Figs. 1 and 2 clearly indicates that the conveyor belt of Fig. 2 comprises a plurality of the trays of Fig. 1, there would be no way, if elements 2 and 3 were bonded together, for the elements to either move relative to themselves or around rollers 11 and 12. Accordingly, frozen food in the tray would not be dislodged at roller 12 and the stated purpose of the invention entirely frustrated. Accordingly, given the inoperative description of the invention presumed by the Examiner (without any indicated basis) and the operative description provided by the disclosure

and the comments herein, applicant submits Patent Office policy supports the operative description.

In conclusion, the disclosure establishes conclusively the equivalence of plurality of elements 2 and 3 and a plurality of elements 9 in numerous places throughout the specification, claims and drawings which the Examiner has not specifically addressed or challenged. Appellant submits that the Examiner has not construed the claims as required by § 2164.04 of the MPEP, or shown that undue experimentation by the skilled artisan is in any way necessary for enablement.

Finally, the Examiner quotes lines 35 of page 4 to line 2 of page 5 only as originally filed.

These lines now read based on submitted entry of Appellant's August 11, 1999, amendment as follows:

> "The conveyor belt 8 thus may consist of e.g. a plurality of trays 1 shown in Fig. 2 which are formed when elements 9 (which consist of elements 2 and 3 in the order shown in Fig. 1) are pressed together by push rod 13 along path A on conveyor belt 8, wherein trays 1 are interconnected in the same manner as elements 9, of which they are made up"

It is unclear to Appellant why the Examiner chooses to ignore the amended version which has a clear basis from the passages from the specification and claims cited above without introducing any new matter.

However, whether the amendments are argued to be included or not, the original language of the specification, clearly supports that elements 2 and 3 are movable relative to one another and make up the trays comprising conveyor belt 8 shown in Fig. 2 as clearly indicated from the passages cited above from the specification and from the claims.

With regard to issue 2 and 3 above, Appellant's position is as follows:

Whether or not the group of claims comprising claims 1-7 and 10-16 are unpatentable for the reasons stated by the Examiner (clearly not admitted), allowed and generic claim 1 with claims 8 and 9 are allowable as the Examiner has not rejected claims 8 and 9 on the same basis as claims 1-7 and 10-16 as containing subject matter which was not described in the specification in such a way to enable one skilled in the art to make and use the invention. Given that the features of claims 8 and 9 are enabled by the specification including Figs. 4-6, generic claim 1 is equally enabled and allowable along with claims 8 and 9.

Appellant respectfully requests that the Examiner's rejection be withdrawn and the claims allowed.

Respectfully submitted,

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APPENDIX I

CLAIMS

1. An apparatus for freezing of a food product by contacting a surface area (4; 31) of a chilled tray (1), characterized in that the tray (1) consists of a plurality of elements (2, 3; 9; 22, 23), which are juxtaposed to form a surface area (4; 31), said elements being movable relative to each other to change a relative position of at least one element at a time and each element occupying such a small surface in the surface area (4; 31) that the change of the relative position is possible after freezing of the food product contacting the tray.

2. An apparatus as claimed in claim 1, characterized in that the surface area (4) of the tray (1) is essentially horizontal during freezing of the food product.

3. An apparatus as claimed in claim 1, characterized in that the elements (9; 22, 23) form a flat surface area.

4. An apparatus as claimed in claim 2, characterized in that the elements (2, 3) form a surface area (4) which comprises a plurality of open cavities (5) for receiving a semiliquid or liquid food product.

5. An apparatus as claimed in claim 1, characterized in that the elements (2, 3; 9; 22, 23) are enlongate.

6. An apparatus as claimed in claim 1, characterized in that the elements (2, 3; 9; 22, 23) are parts of a conveyor belt (8).

7. An apparatus as claimed in claim 1, characterized in that the change of the relative position of the elements (9) is a turning.

8. An apparatus as claimed in claim 1, characterized in that the change of the relative position of the elements is a translation perpendicular to a plane extending essentially in parallel with the surface area.

9. An apparatus as claimed in claim 1, characterized in that the change of the relative position of the elements (22, 23) is a translation in a plane extending essentially in parallel with the surface area.

10. An apparatus as claimed in claim 1, characterized in that the tray (4) on the side opposite to the side contacting the food product is chilled by intensified blowing of cold air.

11. An apparatus as claimed in claim 2, characterized in that the elements (9; 22, 23) form a flat surface area.

12. An apparatus as claimed in claim 11, characterized in that the elements (2, 3; 9; 22, 23) are parts of a conveyor belt (8).

13. An apparatus as claimed in claim 3, characterized in that the elements (2, 3; 9; 22, 23) are parts of a conveyor belt (8).

14. An apparatus as claimed in claim 2, characterized in that the elements (2, 3; 9; 22, 23) are parts of a conveyor belt (8).

15. An apparatus as claimed in claim 14, characterized in that the tray (4) on the side opposite to the side contacting the food product is chilled by intensified blowing of cold air.

16. An apparatus as claimed in claim 13, characterized in that the tray (4) on the side opposite to the side contacting the food product is chilled by intensified blowing of cold air.

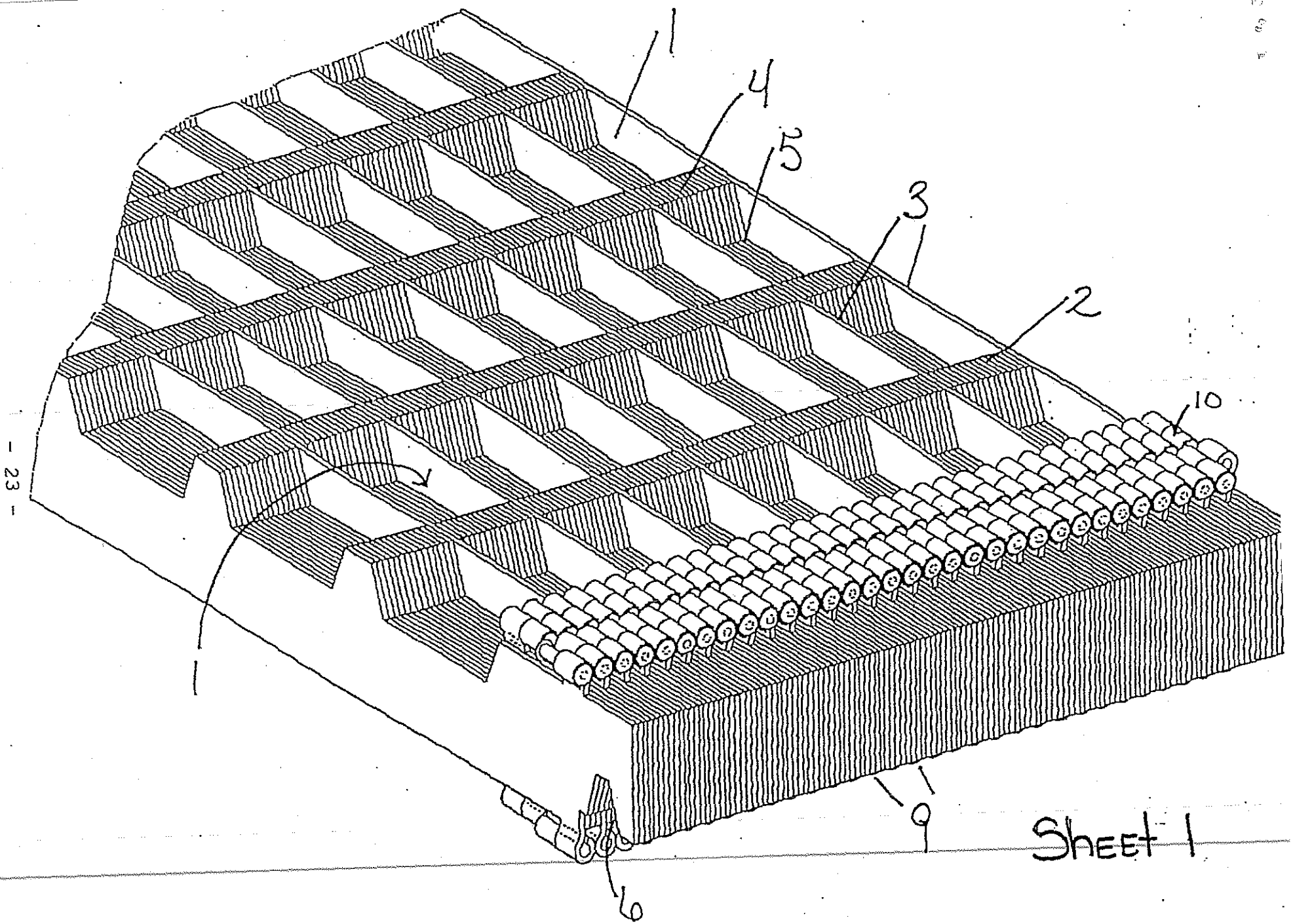
17. An apparatus as claimed in claim 9, characterized in that the tray (4) on the side opposite to the side contacting the food product is chilled by intensified blowing of cold air.

18. An apparatus as claimed in claim 8, characterized in that the tray (4) on the side opposite to the side contacting the food product is chilled by intensified blowing of cold air.

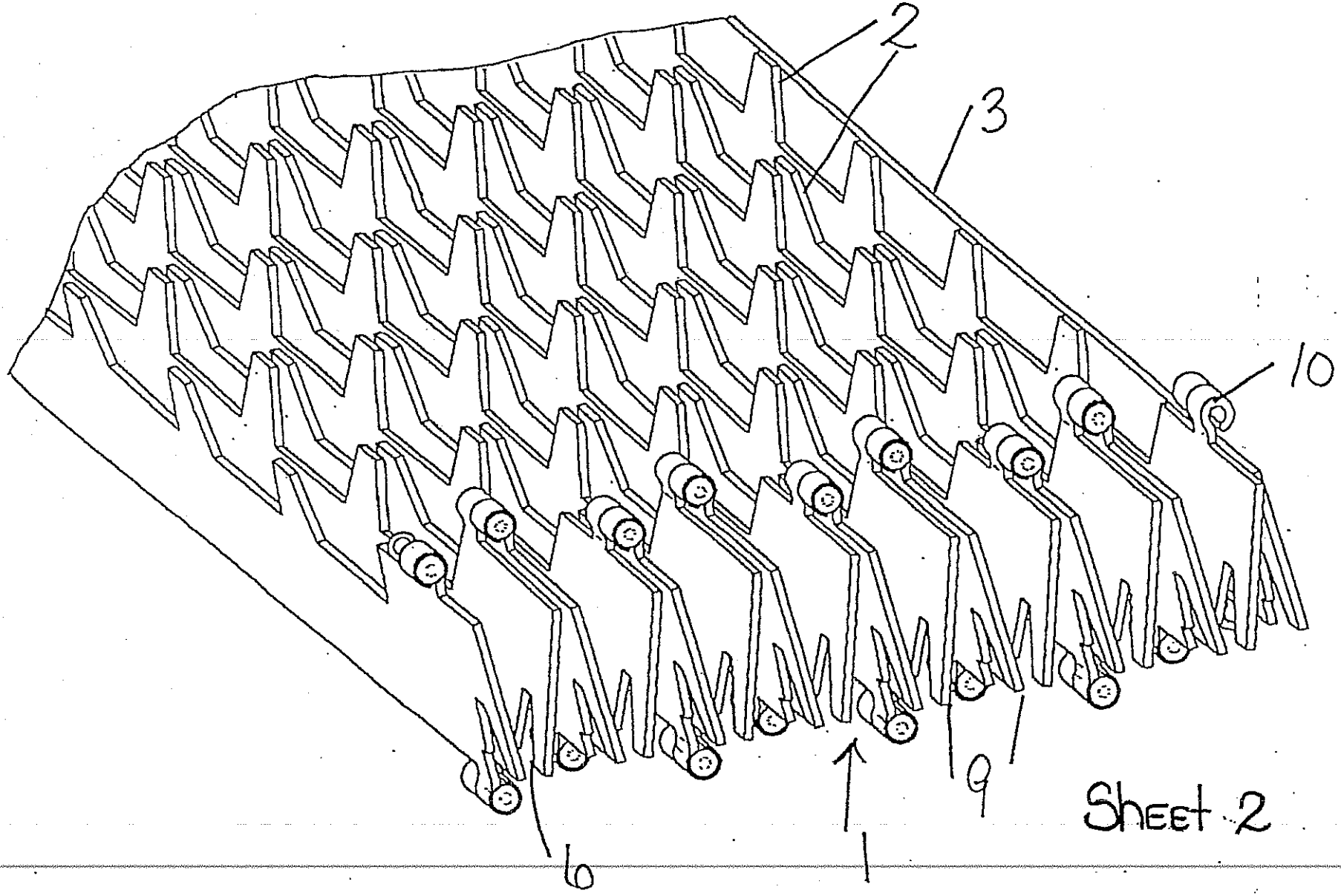
19. An apparatus as claimed in claim 7, characterized in that the tray (4) on the side opposite to the side contacting

the food product is chilled by intensified blowing of cold air.

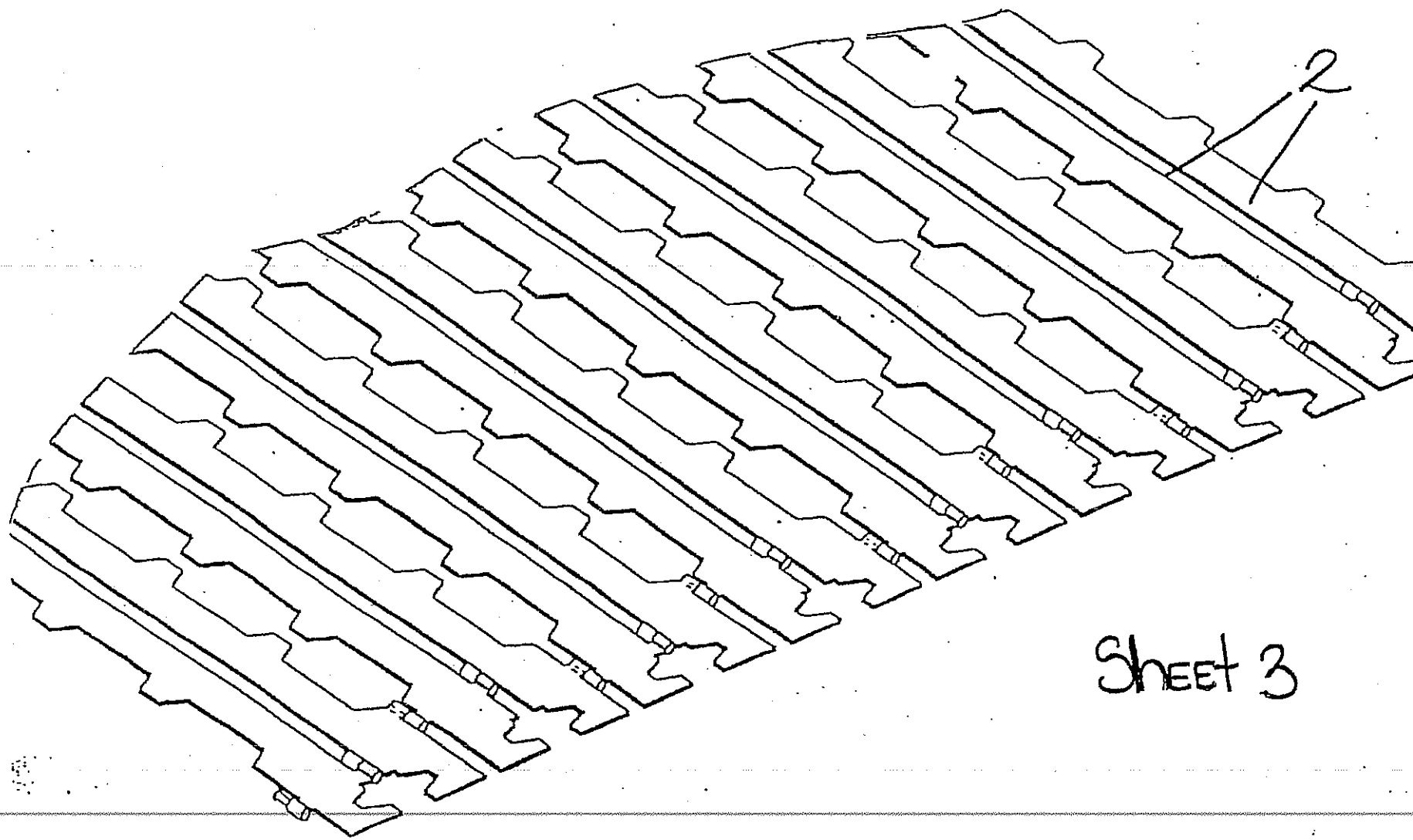
20. An apparatus as claimed in claim 4, characterized in that the tray (4) on the side opposite to the side contacting the food product is chilled by intensified blowing of cold air.

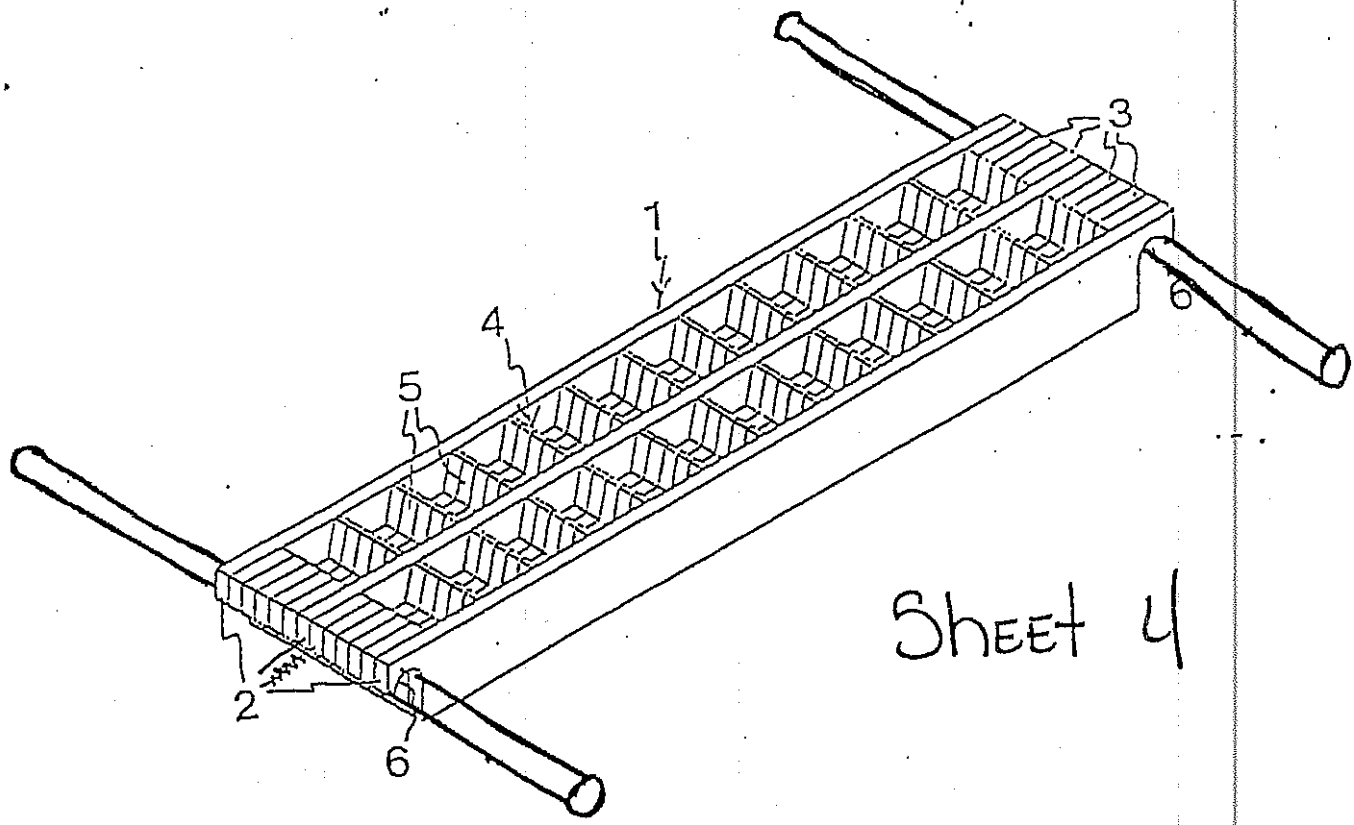


Sheet 1



Sheet 2


2
Sheet 3



Sheet 4