

COMMISSIONER'S DECISION

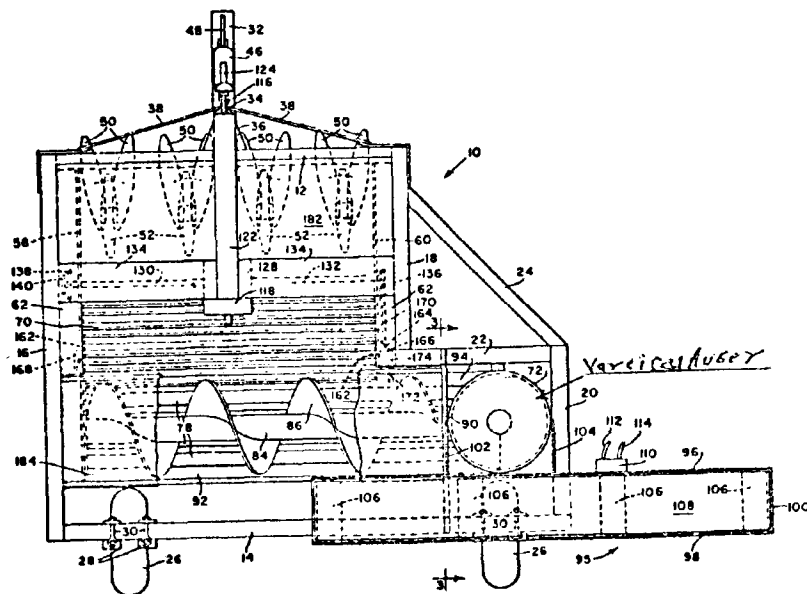
Obviousness: Root Crop Harvester

Some claims, which did not include the "force feeding means," were refused for failing to define a patentable advance in the art.

Final Action: Affirmed

This decision deals with a request for review by the Commissioner of Patents of the Examiner's Final Action dated October 29, 1975, on application 209123 (Class 55-1). The application was filed on September 12, 1974, in the name of Deere & Company, and is entitled "Root Crop Harvesting Implement."

The application, which is a reissue of Patent 952320, relates to agricultural harvesting equipment. The harvester includes a main frame, a plurality of digger wheels on the front of the main frame, a conveyor means supported on the frame to receive roots and a transversely extending auger conveyor which moves the roots to a vertical auger conveyor. It is necessary that the vertical auger be force-fed as will be discussed below. Figure 1, shown below, is illustrative of that arrangement.



In the Final Action the examiner refused claims 1 to 3, 8 and 12 for failing to define patentable subject matter over the following references:

United States Patents

1,067,884	July 22, 1913	Sladinska
2,693,706	Nov. 2, 1954	Rodin
3,348,706	Oct. 24, 1967	Hyman

German Patent

48,090	Aug. 7, 1889	Kurts
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The examiner also advised the applicant that claims 4 to 7 and 9 to 11 are directed to patentable subject matter "and they would be considered as allowable when written in proper [independent] form."

In response to the Final Action the applicant cancelled all the claims on file and substituted new claims 1 to 12 inclusive. In view of the fact that all the claims were cancelled we do not deem it necessary to state the examiner's position in the Final Action, nor do we think it necessary to give the position of the applicant in his response thereto for the following reasons.

In reviewing the prosecution of this application we find that the applicant stressed the necessity of forcefeeding the vertical auger. On that point he stated, on page 2 of the action of June 20, 1975, as follows:

Auger conveyors are most efficient when working at or near the horizontal and have a decrease in efficiency as they approach the vertical position, it becomes necessary to forcefeed the auger conveyor so that the material entering the auger conveyor will prevent other material being conveyed by the auger from gravitating on the vertical flight of the conveyor.

It is clear then that the forcefeeding arrangement (also known as a trough means) is an essential feature which must be included in any allowable claim. The apparatus is simply not a useful machine without that feature. The applicant states that "Neither prior reference [Rodin or Kurts]

provides the forcefeeding nor even suggests it." This, of course, was appreciated by the examiner when, in a capably prepared Final Action, he indicated that claims 4 to 7 and 9 to 11 were considered as allowable over the prior art because this feature was present. These claims specifically recited a conveyor means which includes an elongated trough means or the equivalent.

We will now consider the amended claims. Claims 1 and 4 read as follows:

1. A root crop harvester comprising: a main frame; root digging means secured across the forward end of the frame; elevator means including a substantially upright auger conveyor mounted on the frame transversely offset of the fore-and-aft center line, for moving roots from the lower end thereof upwardly to a deposit area; and conveyor means supported on the main frame to receive roots from the digging means and moving the same upwardly from the root digging means including conveyor means for supporting and moving the roots laterally, thereby forcefeeding to the lower end of the upright auger conveyor.

4. A root crop harvesting implement as set forth in claim 3 further characterized in that the second conveyor means includes elongated trough means extending transversely along the upper rear end of the first conveyor means and an auger journaled in the trough means for moving roots deposited in the trough means along the trough to the lower end of the upright auger conveyor. [emphasis added]

When we consider claim 1 we find that it refers, in part, to a conveyor for moving the roots laterally, "thereby forcefeeding to the lower end of the upright auger conveyor." At first blush this would appear to satisfy the requirement that a forcefeeding arrangement, the essential feature for an allowable claim, is then present. This, in fact, is not the situation. The lateral conveyor will not, by itself, forcefeed the upright auger; it must be accompanied by some other means such as "the trough means." Claim 1 then does not include the specific means on which basis the invention is predicated. Furthermore, without this feature, as previously mentioned, the machine will not function as promised. This claim then should be refused for failing to claim a practical and truly operable embodiment. In

addition to the above this claim is clearly not directed to "a means of force feeding" which was clearly set out, by the applicant, as the advance in the art. In the circumstances no discussion of the prior art is deemed necessary.

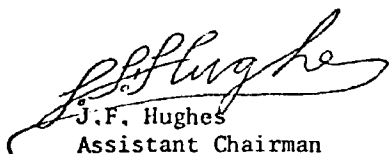
Claims 2, 3, 8 and 12 also fail to make reference to a forcefeeding means. The same arguments used to refuse claim 1 apply equally to these claims and they should also be refused,

By contrast, claim 4, which depends on claim 3 as noted above, does include the forcefeeding means and is covered by the following, "... the second conveyor means includes elongated trough means..." It follows that this claim then would be an allowable claim if written in independent form. Claims 5, 6 and 7 would also be allowable if they were made dependent directly or indirectly on claim 4.

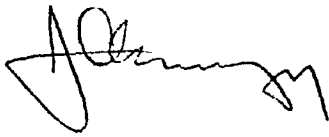
Claims 9, 10 and 11, which depend directly or indirectly on refused claim 8, are also allowable using the same reasoning as discussed above with respect to claims 4, 5, 6 and 7. Claim 9, of course, would have to be written in independent form.

In summary, claims 1, 2, 3, 8 and 12 should be refused for failing to define the invention disclosed, as set forth and discussed by the applicant, with sufficient particularity and distinctness. By contrast we find that claims 4 to 7 and 9 to 11 are considered to relate to a patentable advance in the art when presented in the recommended form.

We recommend that amended claims 1, 2, 3, 8 and 12 be refused, but that claims 4 to 7 and 9 to 11 be allowed when presented in the recommended form.


J.F. Hughes
Assistant Chairman
Patent Appeal Board, Canada

I have reviewed the prosecution of this application and considered the recommendation of the Patent Appeal Board. In the circumstances I refuse to allow claims 1, 2, 3, 8 and 12, but I am prepared to allow claims 4 to 7 and 9 to 11 when presented in proper form as indicated by the Board. The applicant has six months within which to remove claims 1, 2, 3, 8 and 12 and resubmit claims 4 to 7 and 9 to 11, or to appeal this decision under the provision of Section 44 of the Patent Act.



J.H.A. Gariépy
Commissioner of Patents

Dated at Hull, Quebec
this 7th. day of March, 1977

Agent for Applicant

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