

COMMISSIONER'S DECISION

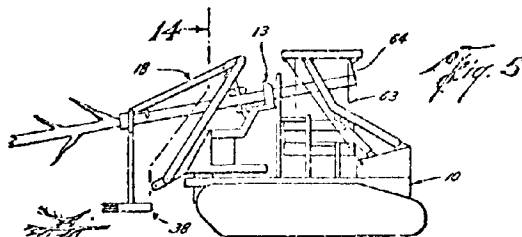
SECTION 36: Claims ambiguous & unsupported - Tree Harvesting Machine

The applicant wanted to claim the broad concept of his invention. He was required to restrict to a practical embodiment of the invention. Amendments were suggested, some which would be accepted.

Final Action: Modified.

This decision deals with a request for review by the Commissioner of Patents of the Examiner's Final Action dated April 2, 1975, on application 055,150 (Class 144-29). The application was filed on June 23, 1969 in the name of Thomas N. Busch, and is entitled "Tree Harvester."

This application relates to a tree harvester in which an articulating boom carries a mechanism for felling a tree, picking it up, rotating it to substantially a horizontal position, and then moving the tree after delimbing through a buck shear on the vehicle where the tree is cut into sections. Figure 5, shown below, illustrates one embodiment of the alleged invention:



In the Final Action the examiner refused claims 8 to 11. Claims 8 and 9 were rejected as ambiguous and for lack of support in the disclosure, while dependent claims 10 and 11 were refused for lack of a proper antecedent for the term "said cradle."

In that action the examiner stated (in part):

...

Applicant has argued that since the boom is mounted on the vehicle and a delimbing means is mounted on the boom, it is proper to say that the delimbing means is carried by the vehicle.

Alternatively, the applicant has also argued that the delimbing means may indeed be located anywhere on the vehicle and need not be mounted on the boom.

However, neither of these arguments are acceptable. If, in claim 8, it is meant that the delimbing means is mounted on the boom, the claim is ambiguous and does not properly describe the invention. The invention can be clearly described by stating that the delimbing means is carried on the boom and it is not acceptable to use ambiguous language where a device can be accurately described.

If, on the other hand, claim 8 is intended to cover an embodiment of the invention where the delimbing means is carried on the vehicle as opposed to being carried by the boom, claim 8 is then not fully and properly supported by the disclosure. The disclosure does not describe an embodiment where the delimbing means is carried on the vehicle, and to make such an embodiment while still utilizing applicants grasping means and boom arrangement would be impractical or may require further invention.

However, it appears that claim 8 as worded sets out two separate means mounted at two separate locations. In claim 8, the grasping means is located on the moveable boom while the delimbing means is located on the vehicle and not on the boom. The recitation of the boom assembly and the shear mechanism on the vehicle and of the tree-cutting means and grasping means on the boom in claim 8, lines 1 to 5, distinguish the vehicle and the boom as two separate locations.

The applicant, however, does not teach in his disclosure that the grasping means and delimbing means are two separate means since a single means on his machine is adapted to perform as a grasping means and as a delimbing means, and this single means is located on the movable boom.

...

Applicant states in the letter that "the delimbing means may be positioned anywhere on the machine". It is assumed that applicant is suggesting a location on the machine which is co-axial with the tree travel through the machine. If the delimbing means is located to the right of the buck shear "13" (when viewing Figure 1), the part of a tree having limbs would interfere with the operation of the grasping means, the feed rollers and the buck shears while the tree moved to the right. Obviously, applicant does not

intend this location for a delimbing means to be operative, nor would a location just to the left of the buck shears, or just to the left of the feed rolls or behind the grasping means be satisfactory. It should be noted that the tree should be delimbed before passing through arms 19, 21 of the inner arms of the boom. It should also be noted that since the grasping means is used at all times during the processing of a sheared tree, the grasping means will continue to act as a delimeter and delimb the tree whether another delimeter is placed behind the grasping means or not. Therefore, adding a delimeter to any location on the machine behind the grasping means will mean that a second delimeter will be present, and the disclosure does not teach the use of two delimbing means on a machine.

When the delimbing means is located ahead of the grasping means, it will be observed that the above noted problems are not present. Also, since the delimbing and the grasping means are shown as one element, a relocation of the delimbing means on to the vehicle would also require a modification of the grasping means. Processing of a felled tree would not be possible without the support provided by the grasping means during a processing operation on a tree.

Such modification of the grasping means is not suggested by the disclosure and may require further invention.

...

The applicant in his response to the Final Action, dated September 29, 1975, stated (in part):

...

The primary issue to be decided is whether Applicant is privileged to claim the concept of his invention, or whether Applicant is limited to claiming substantially the exact structure shown in the Application when there is no rejection on prior art and no reason in the prior art to limit the claims to substantially the exact structure shown.

...

Delimbing means for tree harvesting machines are notoriously old and are shown to be old by the art of record in this case. For example, in Patent No. 833, 135, the delimeter is carried directly on the machine and the log is moved through the delimeter on its way to the buck shear. The Examiner has not traversed Applicant's position that delimeters directly mounted on the machine and not on a log-handling boom are old and well known.

It is Applicant's position that inasmuch as delimbing devices are old and well known, Applicant should be privileged to claim the delimbing device mounted on the machine which would permit the claims to cover the delimbing function wherever it might be carried out on the machine.

The Examiner has argued that in the particular machine shown, the construction of the boom and other components of the machine would prevent repositioning of the delimbing means. The Examiner loses sight of the fact that the machine is an engineered unit. If the delimeter were moved to other portions of the apparatus, the machine would be redesigned to accommodate such movement. For instance, the inner boom need not be provided by two structural members 19 and 21, as shown in Figure 14, which embrace the tree, but might be a single member which is positioned in an out-of-the-way area. The delimbing device might readily be mounted directly in front of the rollers 14 to delimb the tree immediately before it passes through the rollers on its way to the buck shear 13 as suggested by the 883,135 patent. In processing a tree in this manner, the grasping means could be opened or the grasping means might be utilized to grip the tree at several successive positions along its length to assist in aligning and passing the tree through the buck shear.

It is also obvious that another boom could be supplied on the vehicle and could carry a delimeter encircling the tree outboard of the present grasping means, which would then delimb the tree before it passes through the grasping means. This would not require any further modification of the illustrated machine. Such a modification is certainly supported by the specification which points out that the delimbing means could be provided by a separate device. Such a separate device might well include a completely separate mounting of the delimbing machine on a boom on the vehicle to delimb the tree outboard of the grasping means.

Applicant should not be required to describe in the claims the exact structure shown in the specification.

We note that the applicant in his response to the Final Action has proposed amending claims 8 to 11. The question to be decided is whether the amended claims overcome the grounds of rejection made in the Final Action. Amended claim 8 reads as follows:

A mobile tree processor comprising a vehicle having mounted thereon an articulated boom assembly including a main boom and a reach boom, a vertically disposed shear mechanism, tree-cutting means carried on the free end of said reach boom for cutting a standing tree, grapple means carried on the free end of said reach boom above said tree-cutting means for grappling a standing tree severed by said tree-cutting means, said grapple means being pivotal through an angle of approximately 90° so that a tree after it is cut by said tree-cutting means can be tilted from its generally vertical position into a generally horizontal position and located generally longitudinally of said vehicle in substantial alignment with said vertically disposed shear mechanism but spaced therefrom, delimbing means for removing branches from said cut tree, said delimbing means including a pair of pivotal arcuate blades, each blade having a cutting edge thereon, and means between said delimbing means and said shear mechanism for pulling the cut tree relative to said delimbing means

to remove branches therefrom and simultaneously feeding a desired length of said cut tree to said shear mechanism, whereby said shear mechanism severs successive bolts from said cut tree after the delimbing thereof by said delimbing means.

The applicant stated that, "The primary issue to be decided is whether applicant is privileged to claim the concept of his invention, or whether applicant is limited to claiming substantially the exact structure [disclosed]...."

On that point we find that a patent is granted to enable the originator of an idea capable of embodiment in articles or in acts adapted to bring an article into existence, to exploit it temporarily for his own benefit. The exclusive right granted, however, should be limited to embodiments of the idea, the inventive step, or invention that has been made. (See Farbwerke Hoechst A.G. v Commissioner of Patents (1962) 22 Fox Pat. (141 at 169). Put shortly, a patent is not granted for an idea, but only for the embodiment of an idea (See also The King v Uhlemann Optical Co. (1949), 10 Fox Pat. C.24 at 44). In other words it is only the practical embodiment of an idea or concept which constitutes subject matter. The applicant is entitled to make his claims as broad as the prior art and the scope of his disclosure permits. He need not, of course, specifically recite every modification which could obviously be made to his invention. Nor need the claims be limited to the preferred embodiment, though they must define the invention as disclosed with sufficient particularity and distinctness to comply with Section 36(1) of the Patent Act.

The applicant stated that his device "was developed primarily as a machine for cutting a path through a dense forest. For this purpose, the machine is capable of travelling through the forest on a straight path and reaching out in front of the machine, felling a tree, moving the tree back over the machine, and bucking it into sections by a buck shear on the base of the machine." We note that no prior art was cited, so a practical embodiment of the idea or concept would presumably constitute patentable subject matter.

It is observed that a practical application of the device requires a combination including delimbing means. The last paragraph on page 6 of the disclosure reads:

In order to provide for delimbing a tree as it is moved through the machine, the [grapple] arms 32 and 33 preferably have their upper edge bevelled as shown at 32a and 33a to provide a sharp cutting edge which will remove branches from the tree.

The second paragraph on page 13 goes on to say:

The grasping means may take any desired form, and, as preferred in this disclosure, may also serve as a delimbing means, or the delimbing means may be provided by [a] separate device.
(emphasis added)

It appears therefore that a specific delimbing means does not form part of the basic idea or concept. Nonetheless a practical application, which includes a delimbing means, must be directed to a workable combination before a claim can be considered allowable. A delimbing means cannot be merely mentioned in the claim without specifying how it cooperates with the other elements of the claim. Otherwise the claim covers a mere collation or aggregation of parts. The portion of claim 8 (line 15) which is directed to the delimbing means reads: "... delimbing means for removing branches from said cut tree, said delimbing means including a pair of pivotal arcuate blades, each blade having a cutting edge thereon...."

It is clear that claim 8 merely specifies the cooperation of the delimbing means with the work piece; this is not sufficient. To be practical the combination requires that the delimbing means must be in advance of the grapple means, as the tree progresses through the machine. If this is not so you will have in effect two delimbing means, as the grapppler also acts as a delimber. Any positioning of the delimbing means between the grapppler means and the buck shear would therefore be redundant.

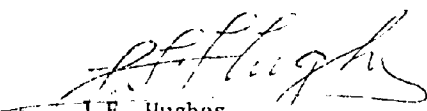
Any allowable claim must therefore be directed to a combination showing the proper cooperation of the elements. Furthermore, the delimbing means must be situated in advance of the grapple means (as the tree is passed through the machine) for a practical workable combination.

We find therefore that proposed claim 8 fails to comply with these requirements, and should be refused. Claim 8, however, would be acceptable if amended at line 16 to read: "... said delimbing means, which is positioned in advance of the grapple means, including a pair of pivotal arcuate blades...."


The same arguments for refusing claim 8 apply equally to amended claim 9. That claim would also be allowable if line 19 was amended to read: "... delimbing means, which is positioned ahead of the grapple means, including knife means...."

Claims 10 and 11, which were amended to overcome the grounds of rejection, are allowable if made dependent on suggested claims 8 and 9.

We are satisfied that the amended claims (8 to 11), proposed by the applicant, fail to define the invention disclosed with sufficient particularity and distinctness to comply with Section 36(1) of the Patent Act. We therefore recommend that these claims be refused, but that with the amendments suggested they be accepted.


J.F. Hughes
Assistant Chairman
Patent Appeal Board

I agree with the recommendation of the Patent Appeal Board. Accordingly, I refuse to accept proposed claims 8-11. These claims, however, will be accepted if amended according to the suggestions made above. The appellant has six months within which to delete the claims, make the appropriate amendments, 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 21st day of June, 1976

Agent for Applicant

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