

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF MICHIGAN  
SOUTHERN DIVISION

3D SYSTEMS, INC.,

Plaintiff,

-vs-

Case No. 05-74891  
Hon: AVERN COHN

ENVISIONTEC, INC., and  
ENVISIONTEC GMBH,

Defendants.

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**MEMORANDUM**

I.

Oral argument on the Special Master's Report and Recommendation on the parties' motions for summary judgment, and particularly whether or not there are issues that require a trial is scheduled for January 11, 2010. In the memorandum filed October 29, 2009 (Doc. 160) the Court briefly described the focus of the oral argument. This memorandum elaborates on the Court's understanding of what the Special Master recommends, and what are the issues in the case as it now stands.

II.

A.

This patent case involves four (4) patents: U.S. Patent No. 5,630,981 (the '981 Patent), Method for Production of Three-Dimensional Objects by Stereolithography; U.S. Patent No. 5,651,934 (the '934 Patent), Recoating of Stereolithographic Layers; U.S. Patent No. 5,902,537 (the '537 Patent), Rapid Recoating of Three Dimensional Objects

Formed on a Cross-Sectional Basis; and U.S. Patent No. 4,999,143 (the '143 Patent), Method and Apparatus for Production of Three-Dimensional Objects by Stereolithograph.

A brief description of each patent and its paradigm claim follows.

- '981 Patent - claim 11. Patent relates to stereolithography generally.
- '934 Patent - claim 2. Patent concerns, *inter alia*, a “smoothing element” or a winged blade that forms a uniform coating over each previously solidified object layer.
- '537 Patent - claim 81. Patent relates to the use of an applicator connected to a vacuum pump to “recoat” fresh curable liquid over each previously solidified object layer.
- '143 Patent - claim 35. Patent concerns the formulation of “removable supports” for the object.

There are two (2) accused devices: the Prefactory machine and the Vanquish machine. Each machine is used to make three-dimensional objects based on a computer model. Each uses a digital light projector to selectively project light onto curable resin. In the Prefactory machine the digital light projector is positioned below the curable resin. In the Vanquish machine the build platform moves continuously downward and away from the digital light projector.

Each party has moved for summary judgment: plaintiff for infringement, defendant for non-infringement.

## B.

Before the Court is the Special Master’s Superceding Report and Recommendations on the Parties’ Summary Judgment Motions (Doc. 153). The Superceding Report followed

on the Special Master's Report and Recommendations on the Parties' Summary Judgment Motions (Doc. 146) and the Order of Supplemental Reference to Special Master (Doc. 151) entered following the parties' objections to the initial Report and Recommendations.

Briefly described, the Special Master recommends that the Court grant summary judgment of non-infringement of the '537 Patent and of the '143 Patent, and that there are genuine issues of material fact relating to the claims of infringement of the '934 Patent and the '981 Patent, and therefore summary judgment of infringement be denied as to the issues relating to these patents.

The Special Master, in his report, analyzes the limitations of the paradigm claim of each patent as the limitations apply to the Prefactory machine and to the Vanquish machine.

C.

Particularly

1.

As to claim 11 of the '981 Patent, the Special Master finds that there are genuine issues of material fact regarding limitation 5 which states

providing data representing the three-dimensional object to be formed which was generated on CAD systems

and limitation 12 which states

exposing said machine to said prescribed radiation in response to said data

The Special master says:

It seems to this author that Envisiontec and its witnesses are reading limitations into the disputed claim terms 5 and 12 that

do not exist and this Court specifically found not to exist. Nonetheless, I cannot recommend a finding of infringement as to these limitations. The doubt here arises from the apparently inconsistent statements made by 3D Systems about the patentable differences between voxels and the two-dimensional data that is disclosed in 3D Systems' patents.

and concludes

In the circumstances, the issue of correspondence between claim limitation 5 and 12 and defendant's Prefactory and Vanquish machines is material and disputed.

2.

As to claim 2 of the '934 Patent, the Special Master finds that there are genuine issues of material fact regarding limitation 6 which states:

forming a uniform coating of a desired layer thickness over the previously formed layer

and limitation 9 which states:

said [smoothing element] winged blade having a plurality of substantially separate members on a lower surface thereof for contacting the building material

The Special Master says:

Whether the cooling blade of the Vanquish machine is in contact with the uncured resin and whether in its operation the cooling blade forms a smooth level coating of uncured resin of a desired thickness are disputed issues of material fact. A video of the cooling blade in action seems to show that the blade contacts the uncured resin to smooth it (Dkt. 104-9-3), but a jury, not I, should make this determination. \* \* \* I recommend that the parties' motions as to limitations 6, and 9 be denied. \* \* \*

3.

As to claim 81 of the '537 Patent, the Special Master finds first that the assertion of infringement is limited to the Vanquish machine, and second, that there is no genuine issue

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of material fact regarding the fact that limitations 6 and 7 are not present in this machine, and therefore there is no infringement of the '537 Patent.

These limitations read:

- (6) an applicator
- (7) for forming layers of material

The Special Master says:

The parties have agreed that the term “applicator” means a device that applies and smooths the building material. It is undisputed that the cooling blade in the Vanquish machine does not dispense uncured building material. Its acknowledged function is to cool the uncured building material and, as 3D Systems argues, to smooth the uncured building material. The infringement issue thus reduces to the meaning of the term “applies.”

\* \* \*

The specification provides a clear meaning for and function of the terms “apply” and “dispense.” They are one and the same. *O.I. Corp. v. Tekmar Co.*, 115 F.3d 1576, 1582, 42 USPQ2d 1777, 1781 (Fed. Cir. 1997). The cooling blade of the accused Vanquish machine does not apply or dispense uncured building material. In the circumstances, there is no infringement of limitations 6 and 7.

4.

As to claim 35 of the '143 Patent, the Special Master finds that the assertion of infringement is limited to the Vanquish machine, and second that there is no genuine issue of material fact that limitation 7 is not present in this machine, and therefore there is no infringement of the '143 patent.

The limitation reads:

said support to cross sectional width being **thin**, and comprising a solid which extends along a path connecting said

second surfaces, the path having a vertical path component which is greater than any horizontal path component. \* \* \*

The Special Master states:

Clearly, the Vanquish support is not web-shaped and no part of the Vanquish support could be considered web-shaped.

s/ Avern Cohn  
AVERN COHN  
UNITED STATES DISTRICT JUDGE

Dated: January 6, 2010

I hereby certify that a copy of the foregoing document was mailed to the attorneys of record on this date, January 6, 2010, by electronic and/or ordinary mail.

s/ Julie Owens  
Case Manager, (313) 234-5160