

NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

IN RE: GENERAL ELECTRIC COMPANY,
Appellant

2019-1112, 2019-1113, 2019-1115

Appeals from the United States Patent and Trademark
Office, Patent Trial and Appeal Board in Nos. 14/593,087,
15/070,427, 15/070,483.

Decided: October 18, 2019

STEPHANIE M. LAUNDRE, Ziolkowski Patent Solutions
Group, SC, Port Washington, WI, for appellant. Also rep-
resented by TIMOTHY J. ZIOLKOWSKI.

MARY L. KELLY, Office of the Solicitor, United States
Patent and Trademark Office, Alexandria, VA, for appellee
Andrei Iancu. Also represented by MICHAEL S. FORMAN,
THOMAS W. KRAUSE, JOSEPH MATAL, AMY J. NELSON.

Before MOORE, REYNA, and CHEN, *Circuit Judges*.

PER CURIAM.

General Electric Company (General Electric) appeals
from three decisions of the Patent Trial and Appeal Board

rejecting all pending claims in U.S. Patent Application Nos. 14/593,087 (the '087 application), 15/070,427 (the '427 application), and 15/070,483 (the '483 application) (collectively, the reissue applications containing the reissue claims) under 35 U.S.C. § 251. *See* J.A. 1–135. Because we hold that the reissue claims impermissibly attempt to recapture subject matter surrendered during prosecution of U.S. Patent No. 7,990,705 (the '705 patent), we *affirm*.

BACKGROUND

The '705 patent issued from U.S. Patent Application No. 12/118,435 (the original application containing the original claims) on August 2, 2011. It is directed to synthetic jet enhanced convection cooling of component enclosures, which encompass a heat-generating element. It describes using a synthetic jet assembly to direct jet fluid toward or onto the external surface of such enclosures.

The original application, as filed, contained three independent claims:

1. A component enclosure comprising:

one or more sidewalls defining a volume configured to substantially surround a heat generating component positioned within said volume; and

a synthetic jet assembly positioned adjacent at least one of the sidewalls, said synthetic jet assembly including at least one synthetic jet ejector comprising a jet port, said jet port aligned at least one of perpendicularly, parallelly, and obliquely with a surface of said at least one sidewall, said synthetic jet assembly is configured to direct a jet of fluid through said port at least one of substantially parallel to said surface, perpendicularly onto said surface, and obliquely toward said surface.

* * *

9. A method of increasing cooling of an enclosure, said method comprising positioning a synthetic jet assembly adjacent at least one of a plurality of sidewalls of the enclosure, the synthetic jet assembly including at least one synthetic jet ejector including a jet port, the jet port being aligned at least one of perpendicularly, parallelly, and obliquely with a surface of the at least one sidewall, the synthetic jet assembly being configured to direct a jet of fluid through the jet port at least one of substantially parallel to the surface, perpendicularly onto the surface, and obliquely toward the surface.

* * *

17. An electronic component system comprising:

a component enclosure comprising a plurality of sidewalls defining a volume;

a heat generating component positioned within the volume; and

a synthetic jet assembly positioned adjacent at least one of the plurality of sidewalls, said synthetic jet assembly including at least one synthetic jet ejector comprising a jet port, said jet port aligned at least one of perpendicularly, parallelly, and obliquely with a surface of said at least one sidewall, said synthetic jet assembly is configured to direct a jet of fluid through said port at least one of substantially parallel to said surface, perpendicularly onto said surface, and obliquely toward said surface.

J.A. 455–57.

During prosecution of the original application, the examiner thrice rejected the original claims as anticipated

under 35 U.S.C. § 102(b) or obvious under 35 U.S.C. § 103(a). General Electric added limitations requiring that the synthetic jet be external to the component enclosure and that the jet of fluid be external to the component enclosure in attempts to overcome the first two rejections. In response to the third rejection, General Electric added a limitation to each independent claim requiring attachment of the synthetic jet assembly to a sidewall of the component enclosure. With those amendments, the examiner deemed the claims allowable.

On August 1, 2013, General Electric filed a reissue application. The examiner issued a restriction requirement after determining that the application contained claims to both a component enclosure/jet assembly combination and a jet assembly subcombination. In response, General Electric filed three divisionals, which are the reissue applications on appeal. The '087 application claims the component enclosure/jet assembly combination while the '427 and '483 applications claim the jet assembly subcombination.

The examiner rejected all proposed claims based on defective reissue declarations. General Electric appealed. The Board reversed, *pro forma*, noting potential issues with the examiner's analysis. It then rejected the reissue claims as an attempt to recapture subject matter intentionally surrendered during prosecution of the '705 patent. The Board found (1) that the reissue claims were broader than the issued claims because the reissue claims can read on a jet assembly unattached to a sidewall whereas the '705 patent's claims cannot; (2) that the broadened aspect of the reissue claims relates to surrendered subject matter, i.e., an unattached jet assembly; and (3) that the surrendered subject matter had crept into the reissue claims because the attachment-related limitations added during prosecution were entirely absent from the proposed reissue claims. The Board denied the applicant's request for rehearing.

The applicants timely appealed. This court has jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

DISCUSSION

The Patent Act provides an avenue for patent holders to seek reissue of a patent under certain circumstances:

Whenever any patent is, through error, deemed wholly or partly inoperative or invalid, by reason of a defective specification or drawing, or by reason of the patentee claiming more or less than he had a right to claim in the patent, the Director shall, on the surrender of such patent and the payment of the fee required by law, reissue the patent for the invention disclosed in the original patent No new matter shall be introduced into the application for reissue.

35 U.S.C. § 251(a). An inventor may not, however, recapture through reissue subject matter that was surrendered to obtain allowance of the issued claims. *In re Mostafazadeh*, 643 F.3d at 1358. Whether proposed reissue claims violate § 251 is a question of law, which we review de novo. *Id.*

We apply the recapture rule in three steps. *Id.* First, “we determine whether and in what aspect the reissue claims are broader than the patent claims.” *In re Youman*, 679 F.3d at 1343 (internal citation and quotation marks omitted). Second, we “determine whether the broader aspects of the reissue claims relate to surrendered subject matter.” *In re Clement*, 131 F.3d at 1468–69. Third, we “determine whether the surrendered subject matter has crept into the reissue claim.” *Id.* at 1469. “Violation of the rule against recapture may be avoided under this final step of the analysis if the reissue claims ‘materially narrow’ the claims relative to the original claims such that full or substantial recapture of the subject matter surrendered during prosecution is avoided.” *Mostafazadeh*, 643 F.3d at

1358. The narrowing must, therefore, relate to the surrendered subject matter. *Id.* at 1359; *N. Am. Container, Inc. v. Plastipak Packaging, Inc.*, 415 F.3d 1335, 1350 (Fed. Cir. 2005).

The recapture rule does not apply to reissue claims directed to “overlooked aspects” such as “additional *inventions/embodiments/species* not originally claimed.” *Mostafazadeh*, 643 F.3d at 1360. Overlooked aspects, however, are not merely incidental features of the originally claimed invention. *See id.* Rather, they are distinct elements which “were never claimed and thus never surrendered.” *Youman*, 679 F.3d at 1347.

The '087 Application

The Board correctly concluded that the proposed claims of the '087 application impermissibly attempt to recapture surrendered subject matter. First, the proposed reissue claims are broader than the patent claims. The original claims were amended in response to the examiner’s rejections to include limitations that the synthetic jet “is formed integrally with a surface of at least one of the sidewalls and external to said volume,” and “that the jet of fluid flows external to said volume.” '705 patent at Claim 1.¹ The proposed independent claims in the '087 reissue application,

¹ Claims 7 and 13 contain similar limitations. Claim 7 was amended to include limitations that the “method compris[es] coupling a synthetic jet assembly to an external surface of at least one of a plurality of sidewalls of the enclosure,” and “such that the jet of fluid flows external to the enclosure.” And Claim 13 was amended to include limitations that the synthetic jet assembly “compris[es] a housing formed integrally with and positioned adjacent *an external surface of* at least one of the plurality of sidewalls,” and “that the jet of fluid flows external to the volume.” (emphasis added).

claims 29 and 32, eliminate the attachment-related limitations entirely.² Claim 29 of the '087 application is illustrative, and merely requires that the “synthetic jet assembly [is] positioned to cool at least one of the sidewalls.” J.A. 150. The elimination of the attachment limitation expands the scope of the claims to cover unattached jet assemblies which were surrendered during prosecution.

The expanded scope of the '087 application's claims injects the surrendered subject matter into the claims, satisfying steps two and three of the recapture rule. General Electric argues that the Board characterized the nature of the surrendered subject matter in an unreasonably restrictive manner. Appellant Br. at 19–35. It contends the surrendered subject matter related generally to the positioning of the synthetic jet assembly rather than specifically to attachment. *Id.* at 21. We disagree. During prosecution of the original application, the applicant twice amended the claims to add limitations related to positioning of the synthetic jet to no avail. Only after the applicant added language requiring some type of attachment to a sidewall did the examiner allow the claims over the prior art. Thus, the Board correctly determined that the surrendered subject matter was an unattached jet assembly.

General Electric argues that the '087 application's claims avoid violating the recapture rule because the reissue claims recite additional narrowing limitations. The additional limitations identified by General Electric, however, relate only to positioning of the synthetic jet assembly. Any narrowing accomplished by those limitations is thus unrelated to the surrendered subject matter and therefore insufficient to avoid recapture. *See Mostafazadeh*, 643 F.3d at 1358.

² General Electric does not separately argue the patentability of the dependent claims of the '087 application.

General Electric also argues that the recapture rule does not apply to claims 29 and 32 of the '087 application because they include narrowing limitations that constitute overlooked aspects of the invention. Appellant Br. at 48–56. We disagree. Each purportedly narrowing limitation identified by General Electric was within the scope of at least one original claim of the '705 patent and therefore, cannot be said to be an “overlooked aspect.” We therefore hold that the Board correctly determined that claims 29 and 32 of the '087 application are unpatentable under § 251.

The '427 and '483 Applications

General Electric does not dispute that independent claims 16 and 31 of the '427 application and independent claims 16 and 26 of the '483 application attempt to recapture disclaimed subject matter.³ Rather, General Electric argues that its proposed reissue claims that cover only the jet assembly subcombination avoid the recapture rule under the “overlooked aspects” analysis. Appellant Br. at 35–48. Claim 16 of the '427 application is illustrative:

16. A synthetic jet assembly comprising:

a housing;

a plurality of synthetic jet ejectors positioned within the housing and oriented in serial flow communication, the plurality of synthetic jet ejectors comprising at least a first synthetic jet ejector and a last synthetic jet ejector;

³ As is the case with respect to the '087 application, General Electric does not separately argue the patentability of the dependent claims of the '427 and '483 applications.

an internal jet port formed in the housing between adjacent synthetic jet ejectors of the plurality of synthetic jet ejectors; and

an external jet port formed in the last synthetic jet ejector and aligned with the internal jet port.

J.A. 274.

We agree with the Board's conclusion that the standalone jet assembly was within the scope of the originally filed claims and, thus, not overlooked. *See, e.g.*, J.A. 33–35. The original claims encompass and detail the elements of the jet assembly subcombination. For example, original claim 1 includes a “synthetic jet assembly including at least one synthetic jet ejector comprising a jet port . . . said synthetic jet assembly is configured to direct a jet of fluid through said port” Because the original claims encompass the jet assembly subcombination, that subcombination is not an overlooked aspect of the invention.

CONCLUSION

We have considered General Electric's remaining arguments but find them unpersuasive. For the foregoing reasons, we *affirm* the Board's rejection of the reissue claims.

AFFIRMED