GENERAL ELECTRIC COMPANY v. RAYTHEON TECHNOLOGIES CORP., Appeal No. 2019-1319 (Fed. Cir. December 23, 2020). Before Lourie, Reyna, and Hughes. Appealed from Patent Trial and Appeal Board.

Background:

In an inter partes review (IPR) before the PTAB, GE challenged the claims of a patent owned by Raytheon. The patent is directed to an airplane jet engine, which includes a design for a two-stage gas turbine. GE cited two references as prior art against the claims.

The first reference taught all of the limitations of the asserted claims except for a two-stage gas turbine, and instead taught the use of a one-stage design. The second reference set forth reasons as to why use of a two-stage design would be preferential over that of a one-stage design. Although the PTAB made explicit findings that could be considered as motivation for one skilled in the art to combine the references, the PTAB held that the first reference taught away from using a two-stage design. Thus, the PTAB concluded that one skilled in the art would not have been motivated to combine the references. GE appealed the PTAB's decision.

Issue/Holding:

Did the PTAB err in holding that the claims of Raytheon's patent were not obvious over the cited prior art? Yes, vacated and remanded.

Discussion:

The Federal Circuit held that the PTAB lacked substantial evidence to support its findings that the challenged patent claims were not obvious over the cited references. The Federal Circuit explained that the PTAB misapplied the legal standard for teaching away, namely, that "[a] reference does not teach away 'if it merely expresses a general preference for an alternative invention but does not "criticize, discredit, or otherwise discourage" investigation into the invention claimed.'" (quoting *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1327 (Fed. Cir. 2009)). That is, the Federal Circuit disagreed with the PTAB's finding that the first reference criticized, discredited, or otherwise discouraged the use of a two-stage design.

The Federal Circuit explained that the PTAB reached this incorrect finding based on its mischaracterization of the disclosed one-stage turbine as being a critical and enabling technology that provides significant advantages over a prior art two-stage turbine. In particular, contrary to the PTAB's finding, the Federal Circuit found that, when considered as a whole, the first reference establishes that improved shaft and disk materials, as well an improved turbine blade attachment, constitute the "critical" features in the first reference, whereas any system benefits of the one-stage design were left largely undefined. Thus, the Federal Circuit concluded that the one-stage design is not the "critical or enabling" technology of the invention described in the first reference, but instead is merely a "system benefit," thereby undermining the PTAB's conclusion that the first reference discloses a "strong preference" for the one-stage design.

In addition, the Federal Circuit found that the first reference did not make any negative statements about the use of a two-stage design. Thus, the first reference does not criticize, discredit, or discourage the use of a two-stage design. For these reasons, the Federal Circuit remanded the case to the PTAB for reconsideration.