

QUANERGY SYSTEMS, INC. v. VELODYNE LIDAR USA, INC., Appeal Nos. 2020-2070, 2020-2072 (Fed. Cir. February 4, 2022). Before Newman, Lourie, and O'Malley. Appealed from the PTAB.

Background:

Velodyne owns a patent directed to a high definition laser imaging detection and ranging ("Lidar") system for use in autonomous vehicle navigation. The patent focuses on measuring a distance to an object using time-of-flight Lidar. Quanergy petitioned for *inter partes* review ("IPR") to challenge claims of Velodyne's patent for obviousness over a reference that discloses triangulation Lidar. Quanergy argued that the claim term "Lidar" should not be limited to time-of-flight Lidar, and thus the reference renders the claims obvious.

The PTAB upheld the validity of the patent in the IPR. In so doing, the PTAB construed the claim term "Lidar" to mean time-of-flight Lidar, which excludes triangulation Lidar, based on the disclosure in the specification. The PTAB also presumed a nexus existed between the claimed invention and Velodyne's evidence of secondary considerations. Quanergy appealed.

Issue/Holding:

Did the PTAB err in upholding the validity of the patent in the IPR? No, affirmed.

Discussion:

The Federal Circuit affirmed the PTAB's construction of the claim term "Lidar" to mean only time-of-flight Lidar. The specification focuses exclusively on pulsed time-of-flight Lidar. Such exclusive disclosure fairly implies that the claim term refers to a time-of-flight technique to the exclusion of a triangulation technique.

The Federal Circuit thus affirmed the PTAB's conclusion of nonobviousness over the reference that discloses the triangulation technique. On appeal, Quanergy attempted to argue that the reference is not limited to triangulation Lidar but is instead broadly applicable to time-of-flight Lidar. The Federal Circuit rejected that argument noting that Quanergy's expert even stated that the reference is directed to the triangulation technique instead of the time-of-flight technique.

The Federal Circuit further affirmed the PTAB's presumption of the nexus between the claimed invention and Velodyne's evidence of secondary considerations. Quanergy argued that such evidence is attributable to unclaimed features such as a 360° horizontal field of view and a dense 3-D point cloud. However, the Federal Circuit agreed with the PTAB's analysis that such alleged unclaimed features "directly result" from the claimed limitations such as rotating the plurality of laser emitters and the plurality of avalanche photodiode detectors at a speed of at least 200 RPM.

Accordingly, the Federal Circuit affirmed the PTAB's decision in the IPR.