

Keywords: obviousness, secondary considerations, presumption of nexus

General: In determining the presumption of nexus for secondary considerations, a patent claim is not coextensive with a product that includes a “critical” unclaimed feature that materially impacts the product’s functionality.

FOX Factory, Inc. v. SRAM, LLC

United States Court of Appeals for the Federal Circuit

No. 2018-2024, 2018-2025

Decided: December 18, 2019

I. Facts and Procedural History

Appellee SRAM, LLC (SRAM) owns U.S. Patent No. 9,182,027 which describes a bicycle chainring designed to better prevent the bicycle chain from slipping off of the chainring when in use. Independent claims 1, 7, 13, and 20 of the ‘027 patent each recite a chainring with alternating narrow and wide tooth tips and teeth offset from the center of the chainring. Claims 7-12 and 20-26 generally cover tooth tips offset toward the body of bicycle (“inboard offsets”), and claims 1-6 and 13-19, (“the challenged claims”) require teeth offset away from the body of the bicycle (“outboard offsets”). The outboard offsets are found in one of thirteen versions of SRAM’s “X-Sync” chainrings that are sold.

In addition, the ‘027 patent specification discloses other features of a chainring to keep the chain engaged, notably that the narrow and wide teeth fill at least 80% of the corresponding distance in the engaged bicycle chain (“>80% gap filling”). The >80% gap filling is claimed in U.S. Patent 9,291,250 (“the ‘250 patent”), a continuation of the ‘027 patent. In an inter partes review (“IPR”) of the ‘250 patent, it was argued by SRAM that the combination of features claimed in the ‘250 patent (i.e., alternating narrow and wide teeth and wide teeth with >80% gap filling), amongst several others disclosed in the ‘250 patent, leads to a chainring that will retain a chain in even the worst conditions. In that IPR, SRAM also explained that the >80% gap filling feature allows the inventive chainring to better retain the chain under many conditions and amounts to the ‘heart’ of the challenged ‘250 patent claims combined with the narrow and wide tooth configuration. In that same IPR, SRAM further described the >80% gap filling limitation as “critical.”

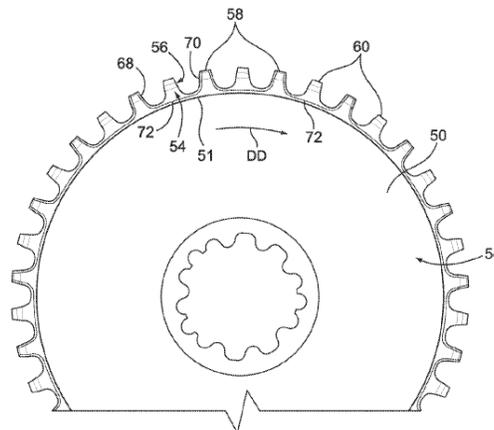


FIG. 4

FOX Factory, Inc. (“FOX”) filed an IPR of the outboard offset claims of the ‘027 patent. In the IPR, the Patent Trial and Appeal Board (“Board”) found that every limitation of the outboard offset independent claims was disclosed by a combination of a Japanese patent (teaching the narrow and wide teeth) and a U.S. patent (teaching the claimed outboard offset) and that a skilled artisan would have been motivated to combine the references, as the skilled artisan would have recognized that the combination of the two features would improve chain retention better than either feature alone. SRAM submitted secondary considerations evidence pertaining to its X-Sync products (commercial success, industry praise, etc.).

Based on its analysis of the secondary considerations, the Board determined that the challenged claims would not have been obvious. The Board found that SRAM was entitled to a presumption of nexus between the challenged outboard offset claims and secondary considerations evidence pertaining to SRAM’s X-Sync products, subject to two limitations: 1) evidence of secondary considerations specifically directed to either an inboard or outboard offset X-Sync product is only entitled to a presumption of nexus with the claims reciting the same type of offset and 2) the presumption of nexus only applies when a product is “coextensive” with a patent claim. The Board interpreted the coextensiveness requirement to mean only that the claims must broadly cover the product that is the subject of the evidence (i.e., secondary considerations evidence pertaining to a specific X-Sync product or component, such as a chainring, crankset, or drivetrain, is only coextensive with the claims broadly covering that particular component so that claims which cover a chainring, are only coextensive with sales or industry praise of X-Sync chainrings, not their cranksets or drivetrains).

FOX argued that SRAM’s products, particularly the X-Sync chainrings, are not coextensive with the challenged claims because the X-Sync products include numerous unclaimed features. The Board rejected FOX’s argument, stating that unclaimed features do not necessarily prevent the presumption of nexus, but they may be the basis for rebutting the presumption. FOX also argued that SRAM’s products are not coextensive with the independent claims because the X-Sync products also embody the claims of additional patents that cover a different invention than the claims of the ‘027 patent. The Board also rejected an argument, put forth by FOX that the X-sync products are not coextensive with the independent claims because they also embody the claims of additional patents that cover a different invention than the claims of the ‘027 patent. FOX appealed the Board’s decision.

II. Issue

Did the Board apply the correct standard for determining whether SRAM was entitled to a presumption of nexus between the challenged claims and SRAM’s evidence of secondary considerations?

III. Discussion

No, the court held that the Board did not apply the correct standard. The court stated that in order to accord substantial weight to secondary considerations in an obviousness analysis, the evidence of secondary considerations must have a ‘nexus’ to the claims, i.e., there must be a legally and factually sufficient connection between the evidence and the patented invention. A presumption of nexus is appropriate when the patentee shows that the asserted objective evidence is tied to a specific product and that product embodies the claimed features, and is coextensive with them. Conversely, when the thing that is commercially successful is not coextensive with the patented invention (e.g., if the patented invention is only a component of a commercially successful machine or process), the patentee is not entitled to a presumption of nexus. In other words, a nexus exists if the commercial success of a product is limited to the features of the claimed invention. Moreover, the court cautioned that a finding that a presumption of nexus is inappropriate does not end the inquiry into secondary considerations;

the patent owner is still afforded an opportunity to prove nexus by showing that the evidence of secondary considerations is the “direct result of the unique characteristics of the claimed invention.

Turning to the claims, the court described the independent claims as covering a chainring that includes wide and narrow teeth and either inboard or outboard off-set teeth and the court also stated that it was undisputed that the X-Sync chainrings include unclaimed features (e.g., the X-Sync chainrings embody the independent claim of the ‘250 patent covering a chainring with both wide and narrow teeth and wide teeth with >80% gap filling). The court noted that it has not been held that the existence of one or more unclaimed features, standing alone, means nexus may not be presumed; if the unclaimed features amount to nothing more than additional insignificant features, presuming nexus may nevertheless be appropriate. Thus, a patentee is not required to prove perfect correspondence to meet the coextensiveness requirement, however, the patentee is required to demonstrate that the product is essentially the claimed invention. The court referred to statements made by SRAM in the IPR of the ‘250 patent, to show that the X-Sync chainrings include unclaimed features in the present claims at issue that the patentee had described as “critical” to the product’s ability to “better retain the chain under many conditions” and that go to the “heart” of the ‘250 patent (i.e., the continuation of the present ‘027 patent at issue). At least in view of this assertion by SRAM about the significance of the unclaimed features in the ‘027 patent, the court found that no reasonable fact finder could conclude that these features are insignificant (i.e., a patent claim is not coextensive with a product that includes a “critical” unclaimed feature that is claimed by a different patent and that materially impacts the product’s functionality).

Because the independent claims of the ‘027 patent do not include the >80% gap filling feature, the court could not find that the X-Sync chainrings are the invention claimed by the independent claims (i.e., the independent claims are not coextensive with the X-Sync chainrings). Accordingly, the court found that the Board erred in presuming nexus between the independent claims of the ‘027 patent and secondary considerations evidence pertaining to SRAM’s X-Sync chainrings. The court looked to additional unclaimed features of X-Sync chainrings (forwardly protruding tooth tips, hook features on the teeth, and mud-clearing recesses) and noted that both the ‘027 patent and SRAM’s marketing materials confirm that the forwardly protruding tooth tips, hook features, and mud clearing recesses each materially impacts the functioning of a chainring. Thus, the court stated that for each of these features that the Board confirms is included in the X-Sync chainrings, nexus can only be presumed between the X-Sync chainrings and a patent claim if the claim includes limitations relating to these features.

The court vacated the Board’s obviousness determination and remanded for further proceedings, noting that on remand, SRAM will have the opportunity to prove nexus between the challenged independent claims and the evidence of secondary considerations. More specifically, SRAM will bear the burden of proving that the evidence of secondary considerations is attributable to the claimed combination of wide and narrow teeth with inboard or outboard offset teeth, as opposed to, for example, prior art features in isolation or unclaimed features.

IV. Conclusion

For evidence of secondary considerations to be given weight in an obviousness analysis, the evidence of secondary considerations must have a nexus to the claims; the patentee must show that the evidence is tied to a specific product and that the product is the invention disclosed and claimed. The finding of a nexus between the evidence and the claims when one or more unclaimed features in a product is permissible if the unclaimed features amount to nothing more than additional insignificant features.