Analysis of Agreement Containing Consent Order to Aid Public Comment

Broadcom makes semiconductor components that are used in CPE devices. These include a "system on a chip" or "SOC," which is the core component directing the functions and features of a CPE device; a "front-end" chip, which converts incoming analog signals to digital signals to be read by the SOC; and a "Wi-Fi" chip, which enables a device to connect to a wireless network. Original equipment manufacturers ("OEMs") incorporate these components into STBs and broadband devices, which they typically build to service-provider specifications and sell to service providers.

Broadcom has long been the dominant supplier of (i) SOCs for traditional "broadcast" STBs,[1] (ii) SOCs for DSL broadband devices, and (iii) SOCs for fiber broadband devices (the "Monopolized Products"). In addition, Broadcom is one of few significant suppliers of (iv) Wi-Fi chips for CPE devices, (v) front-end chips for CPE devices, (vi) SOCs for "streaming" STBs, and (vii) SOCs for cable broadband devices (collectively, the "Related Products," and together with the Monopolized Products, the "Relevant Products").[2] Broadcom also provides essential ongoing engineering and software support services for devices containing its components. The markets for Monopolized Products and Related Products are concentrated and have significant barriers to entry and expansion.

As early as 2016, Broadcom recognized that it faced competitive threats to its monopoly power in Monopolized Products from low-priced, nascent rivals. Broadcom understood that nascent rivals could, by working with key OEMs and service providers, become stronger, more effective competitors. Leading service providers and OEMs were seeking to lessen their dependence on Broadcom and to foster competition in CPE component markets. These customers sought component-supplier diversity for multiple reasons, including to promote competitive pricing and to ensure continuity of supply. Another factor threatening Broadcom's monopoly power was the ongoing "cord-cutting" trend, whereby consumers were beginning to move away from traditional "broadcast" (, cable or satellite) television service and instead to access television and other video content via a "streaming" internet connection. This trend threatened Broadcom because its market position was stronger in "broadcast" STB SOCs (where it has monopoly power) than in "streaming" STB SOCs.

These market conditions presented Broadcom with the incentive and opportunity to engage in anticompetitive conduct aimed at maintaining its monopoly power in markets for Monopolized Products and to use that power to weaken rivals and harm competition in markets for Related Products.

[1] "Broadcast" STBs, sometimes referred to as "traditional" STBs, access television signals over a broadcast interface (, cable, satellite, or fiber), as distinct from "streaming" STBs, which access only streaming "internet protocol" (IP) signals, often over an internet connection.
[2] The proposed order refers to Monopolized Products and Related Products as "Primary Products" and "Secondary Products," respectively.

B. Broadcom’s Anticompetitive Conduct

demonstrate tying in violation of Section 1, a plaintiff must show (1) separate markets for the tying and tied products; (2) defendant's market power in the tying market; (3) the existence of a tie, and (4) that the arrangement forecloses a substantial volume of interstate commerce in the market for the tied product.[14] Coercion, or "the seller's exploitation of its control over the tying product to force the buyer into the purchase of a tied product that the buyer either did not want at all, or might have preferred to purchase elsewhere on different terms,"[15] is a key element in showing the existence of a tie, and can be shown using direct or circumstantial evidence.[16] Such coercion need not take the form of a threat to completely withhold the tying product; a tie may also exist where the seller offers the tying product on such terms that, under the circumstances, ac(ir)5 (d[])5 (d[])5 (dv2md (a)-2 (a)4 (n)-10 (c)4 v)2 (id)2 (e)6 customer’s agreeing to a majority share requirement for specified Related Products. Third, the order prohibits Broadcom from retaliating against a customer that refuses a prohibited majority share requirement or that purchases products from a competitor of Broadcom.

Paragraph I of the proposed order defines the key terms used in the order.

Paragraph II.A. of the proposed order prohibits Broadcom from imposing a majority share requirement on a customer’s purchases of any Monopolized Product. This provision is designed to end Broadcom’s exclusive dealing practices in the markets for Monopolized Products and to enable the emergence of effective competition in those markets. The prohibition applies to sales of Monopolized Products to OEMs and to U.S. service providers. The proposed order specifically includes prohibitions on Broadcom (1) conditioning the sale of a Monopolized Product on a majority share requirement for that product, (2) conditioning price terms, or non-price terms such as delivery or support terms, for a Monopolized Product on a majority share requirement for that product, (3) conditioning other payments on a majority share requirement for a Monopolized Product, or (4) providing certain types of retroactive rebates for a Monopolized Product in exchange for a majority share requirement.

The prohibitions in Paragraph II.A. are qualified by a number of provisos designed to assure that the order does not bar Broadcom from competing on the merits. The first proviso clarifies that the order does not prohibit Broadcom from fulfilling orders from a customer that, over time, chooses to purchase more than 50% of its requirements from Broadcom, provided that such purchases are not pursuant to a majority share requirement prohibited by the order. The second proviso clarifies that a customer’s mere designation of Broadcom as an “authorized” or “preferred” provider does not alone establish a violation of the order. The third proviso clarifies that the order does not prohibit non-retroactive volume discounts. The fourth proviso allows Broadcom, in narrow circumstances, to enter into a majority share requirement in connection with a particular request for proposal (RFP). The proviso provides that Broadcom may agree to a single-source term in connection [illegible] working with a Broadcom rival or for refusing to commit to or maintain a prohibited majority share requirement. Prohibited retaliation includes actual or threatened interference with the sale or delivery of Monopolized Products; withdrawal or modification of, or refusal to extend, relatively favorable price or non-price terms; or refusal to deal with the customer on terms generally available to other similarly situated customers.

The proposed order contains standard provisions designed to ensure compliance. Paragraph III requires Broadcom to maintain an antitrust compliance program and to provide notice to customers of the prohibitions contained in the order. Paragraphs IV through VI contain provisions regarding compliance reports, notice of changes in respondent, and access to documents and personnel.

The proposed Order's prohibitions apply to agreements with Service Providers that serve end users in the United States and to agreements with OEMs worldwide, with the exception of agreements for the sale of products intended for use in devices for end users in China. These products are excluded from the prohibitions on majority share requirements in light of distinct competitive conditions applicable to them. The term of the proposed order is ten years.