

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

ROXUL USA, INC.	:	CIVIL ACTION
	:	
v.	:	
	:	NO. 17-1258
ARMSTRONG WORLD INDUSTRIES, INC.	:	
	:	

MEMORANDUM

KEARNEY, J.

March 8, 2019

After thirty years of enjoying the largest market share in the sale of acoustical ceiling tiles to commercial builders in the United States among three long-established competitors, the leading domestic ceiling tile manufacturer decided it could not afford a Danish ceiling tile manufacturer hoping to sell its ceiling tiles in the United States beginning in 2013 to repeat its success in Europe. Before the Danish manufacturer arrived, the leading domestic manufacturer – and at least one of its existing domestic competitors – offered exclusivity rights to building supply distributors to sell only its commercial tile product in specified domestic markets. The distributors appear to be the end-consumer commercial building contractor’s primary means of purchasing ceiling tiles for their building projects. But when the Danish manufacturer arrived, the leading domestic manufacturer prohibited its exclusive building supply distributors from selling the Danish manufacturer’s ceiling tiles in any market, even if its exclusive distributor did not otherwise sell its ceiling tiles in a certain market. As the large distributors purchased smaller distributors, this clause precluded the Danish manufacturer from accessing building distributors who once sold its product or who never sold the leading manufacturer’s ceiling tiles. The Danish manufacturer sued the lead domestic manufacturer for anti-trust violations under the Sherman and Clayton Acts. Following extensive discovery, the lead manufacturer now asks for summary judgment on all claims and the Danish

manufacturer seeks summary judgment in its favor on one Clayton Act claim. We deny the motions due to genuine issues of material fact as to the extent of anti-trust injury and whether the lead manufacturer: substantially foreclosed the market, possesses monopoly power, used its power to foreclose competition, extended its exclusivity agreements to prevent meaningful competition, and, coerced contractors into accepting exclusivity or otherwise precluding competition.

I. Undisputed facts.¹

Armstrong World Industries, Inc. and Roxul USA, Inc. dba Rockfon, sell suspended acoustical ceiling tiles for commercial buildings in the United States.² Four manufacturers now account for most commercial ceiling tile sales in the United States: Armstrong, United States Gypsum (USG), CertainTeed, and Rockfon.³

Contractors use ceiling tiles to cover ducts, wiring and other structural features in a commercial building.⁴ The tiles fit into grid systems in two-by-two foot or two-by-four foot patterns.⁵ Contractors purchase ceiling tiles for new construction projects and “repair and replace” projects.⁶ For “repair and replace” jobs, contractors take old, worn-out, or damaged existing tiles in buildings and replace them with new tiles.⁷

In a construction project, a building owner can hire an architect to design the building.⁸ The architect provides the specification—or “spec”—for the project, sometimes listing the architect’s desired brand for the necessary building products.⁹ Architects often include the listed brand of ceiling tile for the project and several “equal” alternatives to the listed brand.¹⁰ Ceiling tile manufacturers often influence architects to use their products in the specifications.¹¹

The contractor orders the product based on the architect’s specifications from retailers, distributors, or directly from the manufacturer.¹² Sometimes, the contractor “flips the spec” and orders a brand different than the brand in the specification.¹³ A contractor may “flip the spec”

because of preference, cost, or availability.¹⁴ Contractors sometimes have preferred distributors who they use repeatedly for construction jobs.¹⁵

A. Armstrong, holding the largest market share for commercial ceiling tile in the United States, placed restrictions on the building products distributors if they wish to sell Armstrong's tile.

Armstrong has manufactured ceiling tiles since the 1940s.¹⁶ Armstrong accounts for approximately sixty percent of the suspended acoustical ceiling tile market in the United States in terms of revenue.¹⁷ USG is the second largest manufacturer, with a market share of twenty-nine to thirty percent, while CertainTeed is the third largest with eleven to fifteen percent of the market.¹⁸ Armstrong sells its ceiling tiles primarily to building supply distributors, who in turn sell the tiles to contractors for construction projects.¹⁹ Contractors historically prefer to purchase their building supplies from a distributor who can minimize travel and delay costs. As testified at our *Daubert* hearing, a building supply distributor generally sells more than ceiling tile and will deliver the building products to the job site on the requested date. This practice allows contractors to efficiently manage inventory on a job site. Armstrong provides building distributors selling its acoustical tile with rebates through its "Gold Circle" program.²⁰ Armstrong also provides its distributors with online and in-class sales training programs.²¹

In addition to rebates and training, Armstrong hopes to maintain its market leader position through extensive multi-year contracts with building distributors. For example, Armstrong has long required distributors who wish to sell the largest selling Armstrong tile to only sell Armstrong's tiles: "Distributor will use its best efforts to promote, sell and service all Ceiling Products within its Territory and will not have a direct buying relationship with any other manufacturer of competing ceiling products[.]"²² Armstrong generally limits its written exclusivity agreements to three-year terms, although Rockfon argues these exclusivity agreements last

indefinitely.²³ Like Armstrong, USG also has exclusivity agreements with its distributors.²⁴ Armstrong enjoyed particularly strong distributor relationships with many of the largest building supply distributors, including Foundation Building Materials and Gypsum Management Supply, two of the largest building supply distributors in the United States.

B. Rockfon’s entry into the United States ceiling tile market.

Rockfon, a subsidiary of the Danish company Rockwool International, attained a thirty-percent market share in the European ceiling tile market before 2013. In 2011, Rockfon hired the consulting firm Ducker Worldwide to assess the North American market.²⁵ Ducker reported, assuming a “solid distribution network established upfront,” Rockfon could “capture up to 3% of the overall suspended ceiling market” in five years.²⁶ Ducker also explained in the United States market, “[i]t is most common for a distributor location to be exclusive in one brand (especially smaller distributors). . . . due to manufacturers desire for a secure dealer relationship and decreased competition on the sales floor.”²⁷

Knowing these obstacles, Rockfon entered the United States market in 2013 with a strategy of building a distribution network and placing its tiles in architect specifications.²⁸ In a June 2016 presentation, Rockfon reported “[t]he U.S. market is virtually 100% based on specification for ceiling products—being specified does not mean the project is automatically won, but not being specified severely limits growth opportunities.”²⁹ Rockfon also reached out to architects to increase its presence in specifications.³⁰ By 2017, Rockfon specified over seventy million square feet of ceiling tiles.³¹

While maintaining a strategy of building a presence in specifications, Rockfon also recognized the importance of distributors. A Rockfon representative testified “[h]aving a strong distributor partner in any territory would be key to growing and maintaining market share.”³²

From 2013 to 2017, Rockfon imported its ceiling tiles into the United States from its plant in Poland.³³ In July 2017, Rockfon opened a tile manufacturing plant in Mississippi.³⁴ In the proposal for its first U.S. plant, it stated “[d]istributors see local production as a necessary show of ROCKWOOL’s commitment to the market. Without it, they will not take the risk of carrying ROCKFON as their sole ceilings brand.”³⁵

C. Armstrong’s response to Rockfon’s entry in the United States market.

Armstrong described Rockfon’s entry into the United States market as “one of the most challenging obstacles” to its business and “the most significant competitive threat in 30 years.”³⁶ In September 2012, Armstrong told its employees, “Rockfon entered the European market and was able to gain approximately 30% market share in a relatively short period of time, we cannot afford this to happen in the Americas.”³⁷

1. The “No Rockfon” clause in its exclusive distributor agreements.

In 2013, Armstrong began including a clause in its exclusivity agreements precluding building distributors selling Armstrong tile from selling Rockfon tile even if the distributor’s specific location did not sell Armstrong:

Distributor will use its best efforts to promote, sell and service all Ceiling Products within the Territory. Distributor agrees not to purchase for resale at any Distributor Location listed on Attachment A of the Distribution Agreement, ceiling products of any type from any manufacturer other than Armstrong. For all other Distribution Locations not listed on Attachment A that are owned or operated by any of Distributor, its owners, successors or affiliated companies (“Non-Armstrong Locations”), Distributor agrees (on behalf of itself and its owners, successor and affiliates) that **none of them will purchase any Rockfon ceiling products** for resale.³⁸

If the building distributor decided to sell Rockfon tiles in locations where it did not sell Armstrong tiles, Armstrong could stop supplying Armstrong tiles to any of the building

distributor's locations or allow other distributors to also now sell Armstrong in the distributor's otherwise exclusive markets:

In the event Distributor, its owners, successors or affiliated companies breach the agreements in this Paragraph 4, Armstrong may, in its sole discretion (a) terminate this Agreement or any other distribution arrangement with any of them for cause, (b) terminate for cause the authority to distribute Ceiling Products in all or part of any non-exclusive Territory, and (c) change to non-exclusive distribution any or all of any exclusive distribution Territory granted under this Agreement or any other distribution arrangement with any of them for cause.³⁹

Rockfon refers to this clause as the "No Rockfon" clause.⁴⁰ Armstrong included the "No Rockfon" clause in its written distribution agreements with six different distributors including Foundation Building Materials and Gypsum Management Supply.⁴¹ By 2013, Foundation and Gypsum Management began to purchase smaller distributors across the country.⁴² Since Foundation and Gypsum Management had "No Rockfon" Clauses in their distributor contractors, the "No Rockfon" clause similarly bound a smaller distributor after consolidation.⁴³ Distributors Great Western Building Materials, Gypsum Supply, Badgerland Supply, and Rockwise all sold Rockfon in the United States.⁴⁴ After Foundation and Gypsum Management purchased these distributors, they stopped selling Rockfon tiles.⁴⁵

2. Armstrong's pressure outside of the "No-Rockfon" clause.

Armstrong pressured its distributor CEMEX not to carry Rockfon tiles. Armstrong contracted with CEMEX, a distributor in Florida.⁴⁶ In a November 2014 email, Armstrong area manager Frank Pasquerello informed Armstrong Vice President Paul Corr about a conversation he had with a CEMEX representative:

I explained the situation as we discussed and told him we have asked our distributors not to support Rockfon in markets where they sell Armstrong and also markets where they don't handle the Armstrong line. I explained as you suggested that this was being handled either through new distributor agreements or through verbal understandings for lack of a better word.⁴⁷

After meeting with Mr. Corr in 2014, CEMEX representative Frank Salters understood from Mr. Corr “if CEMEX pursued or attempted to pursue the Rockfon line, that CEMEX might lose the Armstrong line.”⁴⁸

Ceiling tile manufacturers sometimes sell their ceiling tiles directly to contractors – cutting out the middle man building distributor. The parties dispute whether direct sales to contractors is a viable alternative to selling through distributors. Armstrong argues its exclusivity agreements with distributors do not bind contractors, who can purchase their desired tile brand from any distributor or buy directly from a manufacturer. Rockfon argues direct sales to contractors are not a viable means of sale as manufacturers in the United States primarily sell ceiling tiles through distributors. Rockfon also argues contractors are not truly free to choose their desired brand as they usually purchase the brand carried by their preferred distributor.

Acousti, a building contractor, refused to purchase ceiling tiles from Rockfon in 2014 because of “pressure from Armstrong.”⁴⁹ Rockfon representative Douglas Bernard met with Acousti representatives in January 2014.⁵⁰ The contractor’s representatives told Mr. Bernard of having “to take a hands-off approach” with respect to Rockfon, explaining it “had too much to risk with losing the Armstrong line.”⁵¹

D. Rockfon’s growth in the United States market.

In October 2013, Rockwool acquired Chicago Metallic Company, a tile grid manufacturer.⁵² The purchase afforded access to Chicago Metallic’s pre-established distributor network, with 190 grid distributors.⁵³ Rockfon also sold ceiling tiles through Insulation Distributors, Inc., a distributor primarily focused on selling insulation products.⁵⁴ Mr. Noeth, a Rockfon representative, testified IDI “was mostly insulation-focused,” and Rockfon chose

Insulation Distributors “because that was our only option after the changes that were forced on us through the Armstrong pressures.”⁵⁵

In 2014, Rockfon reported \$4,324,953 in ceiling tile revenue.⁵⁶ In 2017, it reported ceiling tile revenue of \$20,999,933.⁵⁷ It projected \$30,707,152 in revenue for 2018.⁵⁸ While Rockfon had an exclusive arrangement with its distributor Gypsum Supply in 2013, it cancelled the arrangement and no longer has exclusivity agreements with distributors.⁵⁹

In a 2017 report, independent consulting firm Simon-Kutcher found Rockfon had access to at least one distributor or contractor in each “metropolitan statistical area.”⁶⁰ Simon-Kutcher also found with respect to the United States market a “[I]ack of distribution partners in core North American markets is a real issue.”⁶¹

E. The parties adduced qualified expert testimony.

Rockfon’s expert Professor Einer Elhauge, an antitrust professor at Harvard University, opined on foreclosure, damages, anti-competitive harm, lack of procompetitive effect, and Armstrong’s monopoly power.⁶² Professor Elhauge calculated Rockfon maintains an approximately two-percent share of the suspended acoustical ceiling tile market in the United States four years after entering the market.⁶³ He calculated Armstrong’s market share as sixty-one to sixty-two percent in terms of revenue, and fifty-five to fifty-six percent in terms of volume from 2013 to 2017.⁶⁴

Professor Elhauge defined sixty-one regional submarkets in the United States where Armstrong charges different prices.⁶⁵ Armstrong calls these areas “Pricing Metros” and assigns each of its distributors to one of the metros.⁶⁶ Armstrong allows its distributors to sell its products only within the defined territory in the distributor agreement.⁶⁷ The defined territory is usually smaller than the Pricing Metro.⁶⁸

Professor Elhauge opined on the extent Armstrong’s exclusivity agreements foreclosed Rockfon from the United States market. He calculated between 2014 and 2017, Armstrong, through its exclusivity agreements, foreclosed thirty-eight to forty-one percent of the United States suspended acoustical ceiling tile market in terms of volume, and forty-six to fifty-one percent of the market in terms of revenue.⁶⁹ When aggregating foreclosure caused by both USG and Armstrong’s exclusivity agreements, he calculated approximately fifty to fifty-three percent foreclosure by volume and fifty-eight to sixty-three percent by revenue.⁷⁰ He opined Rockfon grew faster amongst “unforeclosed” customers—distributors not bound by Armstrong’s exclusivity agreements—than amongst “foreclosed” distributors, those bound by Armstrong’s exclusivity agreements.⁷¹ He calculated between 2014 and 2017, Rockfon’s market revenue share amongst foreclosed distributors did not grow at all, while its revenue share amongst unforeclosed distributors increased from 0.8% in 2014 to 3.2% in 2017.⁷² He also calculated while it had an actual market share of 1.9% in 2017, Rockfon’s market share would have been 3.2% in 2017 “but for” Armstrong’s alleged anti-competitive conduct—its exclusivity agreements.⁷³

Professor Elhauge acknowledged while exclusive dealing agreements can have procompetitive effects, he opined Armstrong’s exclusivity agreements have none.⁷⁴

To measure Rockfon’s damages, Professor Elhauge calculated Rockfon’s lost profits resulting from Armstrong’s exclusivity agreements. He calculated Rockfon’s estimated revenue without Armstrong’s exclusivity agreements—Rockfon’s “but-for” revenue.⁷⁵ Professor Elhauge also calculated Rockfon’s actual revenue amongst “unforeclosed” customers from 2014 to 2017, with projected revenue for 2018.⁷⁶ He then calculated Rockfon’s incremental profit margin for both actual performance and “but-for” performance. To calculate lost profits, Professor Elhauge subtracted Rockfon’s actual incremental profit from its “but-for” incremental profits.⁷⁷

Armstrong proffered Dr. Janusz Ordover, a professor of economics at New York University, to opine on whether Armstrong engaged in prohibited anti-competitive conduct. Dr. Ordover opined the evidence does not support Rockfon's allegations Armstrong violated anti-trust laws with its use of exclusivity agreements.⁷⁸ Dr. Ordover opined Rockfon's growth in the United States market precludes a finding of substantial foreclosure.⁷⁹ Dr. Ordover calculated Rockfon's 2018 market share as 2.7% in terms of volume, and 2.9% for revenue.⁸⁰ Dr. Ordover found this market share consistent with Ducker's projection from 2011.⁸¹

Dr. Ordover found Armstrong's exclusivity agreements have procompetitive effects. He opined exclusivity with distributors "can incentivize investments in a brand and increase competition among brands even if competition among distributors of the same brand is restricted."⁸² He opined because Armstrong invests in its distributors with training classes and sales leads, its exclusivity agreements prevent competitors from "free-riding" on these investments.⁸³ Acknowledging the "No Rockfon" clause in Armstrong's exclusivity agreements applies to locations where the distributor does not carry Armstrong tiles, he opines (1) Armstrong trained distributor employees at locations where the distributor does carry Armstrong tiles and (2) some trained distributor employees move to other locations where the distributor does not sell Armstrong tiles.⁸⁴

II. Analysis.⁸⁵

Rockfon sues Armstrong for (1) unlawful monopolization under Section 2 of the Sherman Act, (2) attempted monopolization under Section 2 of the Sherman Act, (3) restraint of trade through exclusive dealing under Section 1 of the Sherman Act and Section 3 of the Clayton Act.⁸⁶ Rockfon moves for summary judgment solely claiming Armstrong's "No Rockfon" clause violates Section 3 of the Clayton Act. Armstrong moves for summary judgment on all claims.

To establish an anti-trust violation under both Acts, Rockfon must show (1) Armstrong engaged in “anti-competitive conduct” and (2) Rockfon suffered anti-trust injury as a result of the challenged conduct.⁸⁷

Rockfon alleges two types of anti-competitive conduct: (1) Armstrong’s “exclusive dealing” agreements with its distributors and (2) the “No Rockfon” clause preventing its distributors from selling Rockfon tiles. “An exclusive dealing arrangement is an agreement in which a buyer agrees to purchase certain goods or services only from a particular seller for a certain period of time.”⁸⁸ “A claim of unlawful exclusive dealing may be pursued under § 1 or § 2 of the Sherman Act or § 3 of the Clayton Act.”⁸⁹ Rockfon alleges exclusive dealing claims under all three sections. It also alleges Armstrong’s “No Rockfon” clause is a naked restraint in violation of Section 3 of the Clayton Act and seeks summary judgment on this Section 3 claim.

A. We deny Armstrong’s Motion as there are several genuine issues of material fact precluding judgment on whether Armstrong engaged in anti-competitive conduct.

We use the rule of reason to analyze Rockfon’s exclusive dealing agreements under Sections 1 and 2 of the Sherman Act and Section 3 of the Clayton Act.⁹⁰ “Under the rule of reason, an exclusive dealing arrangement is anti-competitive only if its ‘probable effect’ is to substantially lessen competition in the relevant market, rather than merely disadvantage rivals.”⁹¹ We look at “not only the percentage of the market foreclosed, but also take into account ‘the restrictiveness and the economic usefulness of the challenged practice in relation to the business factors extant in the market.’”⁹²

Our Court of Appeals explained there is “no set formula” for determining legality of an exclusive dealing arrangement but generally a plaintiff must show (1) “significant market power by the defendant,” (2) “substantial foreclosure,” (3) “contracts of sufficient duration to prevent

meaningful competition by rivals,” and (4) “an analysis of likely or actual anticompetitive effects considered in light of any procompetitive effects.”⁹³ With regard to foreclosure, we also ask whether competitors “can reach the ultimate consumers of the product by employing existing or potential alternative channels of distribution.”⁹⁴ We also may ask whether Armstrong “engaged in coercive behavior” and whether the Armstrong’s customers could terminate the agreements.⁹⁵ We can also consider whether Armstrong’s competitors engaged in exclusive dealing.⁹⁶

1. We find a genuine issue of fact as to substantial foreclosure.

To establish “substantial foreclosure,” Rockfon must “define the relevant market and prove the degree of foreclosure.”⁹⁷ Rockfon need not prove “total foreclosure” from the market but must show Armstrong’s practices “bar a substantial number of rivals or severely restrict the market’s ambit.”⁹⁸ “[O]ur concern is not about which products a consumer chooses to purchase, but about which products are reasonably available to that consumer.”⁹⁹ “Substantial foreclosure allows the dominant firm to prevent potential rivals from ever reaching ‘the critical level necessary’ to pose a real threat to the defendant’s business.”¹⁰⁰ In circumstances where a monopolist controls the market, we may find foreclosure when the monopolist uses “its power to break the competitive mechanism and deprive customers of the ability to make a meaningful choice.”¹⁰¹ “Traditionally a foreclosure percentage of at least 40% has been a threshold for liability in exclusive dealing cases,” but some courts require a “lesser degree of foreclosure” when the “defendant is a monopolist.”¹⁰²

We also ask in determining substantial foreclosure whether Rockfon could sell its products through alternative channels. “If competitors can reach the ultimate consumers of the product by employing existing or potential alternative channels of distribution, it is unclear whether such

restrictions foreclose from competition any part of the relevant market.”¹⁰³ We ask not whether alternative channels exist, but whether such channels are “viable.”¹⁰⁴

The parties dispute whether Armstrong’s exclusivity agreements substantially foreclosed competition as necessary to find a violation under the Sherman and Clayton Acts. Armstrong argues we should follow the lead of our Court of Appeals’ decisions in *Eisai* and *Barr Laboratories* affirming summary judgment in favor of the defendant in Sherman and Clayton Act cases. Rockfon argues our Court of Appeals’ decision in *United States v. Dentsply International, Inc.*¹⁰⁵ applies.

GN Netcom offers the most persuasive guidance on summary judgment.

While these cases offer similarities to ours, we find Chief Judge Stark’s opinion in *GN Netcom, Inc. v. Plantronics, Inc.*¹⁰⁶ most informative since Armstrong primarily argues its exclusivity agreements do not foreclose competition because they do not bind end-users—the architects and contractors who consume the products. In *GN Netcom*, Netcom sued Plantronics for exclusive dealing in the telephone headset market. Like the ceiling tile market, telephone headset manufacturers primarily sold their products to end users—call centers—through distributors. Plantronics maintained exclusivity agreements with its distributors prohibiting the distributors from purchasing or promoting competitors’ products.¹⁰⁷ Like today’s case, Netcom sued for monopolization and attempted monopolization under Section 2 of the Sherman Act, and restraint of trade under Section 1 of the Sherman Act and Section 3 of the Clayton Act. Netcom argued Plantronics’ exclusive dealing agreements with headset distributors foreclosed it from forty-seven percent of the market.¹⁰⁸ Plantronics moved for summary judgment on all claims, arguing Netcom’s ability to reach to end-users “negate[d] the essential element of significant market foreclosure.”¹⁰⁹

Plantronics argued Netcom could market its products to call centers, sell its products through the “hundreds” of nonexclusive distributors available to Netcom, or even sell directly to call centers and deliver the products through Plantronics’ distributors.¹¹⁰ Plantronics also presented evidence Netcom successfully sold to call centers through these alternative channels, resulting in an increased market share. Plantronics also introduced evidence it did not coerce call centers to purchase its products. Netcom argued such alternative channels were not viable because Plantronics maintained exclusivity with superior distributors, these distributors “control[led] access to end-users,” the distribution networks were “long entrenched,” and the end-users remained loyal to Plantronics’ distributors.¹¹¹

Chief Judge Stark denied summary judgment on all claims finding a genuine issue of fact as to whether Netcom could avail itself of alternative channels. He explained Plantronics must show more than the “mere existence of other avenues of distribution” and the court must assess whether such alternative channels are “practical or feasible in the market as it exists and functions.”¹¹² Chief Judge Stark explained while Plantronics offered evidence showing Netcom could “adequately compete” for end-users’ business despite exclusivity agreements, Netcom offered evidence showing such efforts required “extensive work” to reach end-users.¹¹³ Netcom also offered evidence showing “long-standing relationships between end-users and distributors,” further impeding the viability of alternative channels.¹¹⁴ Thus, while the exclusivity agreements did not contractually bind end-users, Judge Stark found a genuine issue of material fact as to whether Netcom could successfully reach end-users without Plantronics’ distributors.

Armstrong essentially makes the same argument as Plantronics. Armstrong explains because its exclusivity agreements do not bind contractors, a contractor seeking a Rockfon tile can freely choose to find a distributor carrying Rockfon. Armstrong also argues its agreements do not

bind architects from including Rockfon tiles in the specifications for construction jobs.¹¹⁵ Armstrong argues Rockfon did in fact reach out to architects to develop a presence in specifications. In a June 2016 presentation, Rockfon recognized “[t]he U.S. market is virtually 100% based on specification for ceiling products—being specified does not mean the project is automatically won, but not being specified severely limits growth opportunities.”¹¹⁶ Armstrong also argues Rockfon can sell directly to contractors, retail stores, and national accounts. Dr. Ordover estimated direct-to-contractor sales may account for twenty-five percent of sales across the entire market.¹¹⁷ For retail sales, Dr. Ordover testified sales to retail stores accounted for ten to thirteen percent of Armstrong’s revenue from 2011 to 2018.¹¹⁸ Armstrong shows “national accounts” like Kaiser Permanente, Chick-fil-A, RaceTrac, and Taco Bell, purchase ceiling tiles directly from Rockfon.¹¹⁹

Rockfon argues considering the reality of the market, contractors do not freely switch between distributors based on a tile brand preference. Rockfon offers evidence showing contractors choose a tile based on the tiles carried by their preferred distributor. Professor Elhauge found “contractors typically will include a [ceiling tile] brand in its bid for the job only if the contractors’ preferred distributor carries the [ceiling tile] brand.”¹²⁰ As Armstrong maintains exclusivity with the largest and most efficient distributors, Rockfon argues it cannot effectively reach end users who prefer the largest, most efficient distributors. Rockfon instead resorts to inferior distributors not bound by Armstrong’s exclusivity agreements. Professor Elhauge also testified, because ceiling tiles account for only sixteen percent of the building materials contractors use on a construction job, contractors do not switch from their preferred distributor merely to seek out a ceiling tile brand.¹²¹ Rockfon also presents evidence Armstrong pressured contractors not to sell Rockfon tiles at the risk of losing Armstrong’s line.¹²²

Regarding architects, Rockfon argues fifty to seventy-five percent of architect specifications allow contractors to purchase brands “equal” to the specified brand, allowing contractors to influence brand selection.¹²³ Rockfon offers evidence showing while it intended to develop a position in architect specifications, it understood the importance of distributors, as sales through distributors accounted for seventy-seven percent of ceiling tile sales between 2014 and 2017.¹²⁴

Rockfon also argues direct sales to contractors, retail stores, and national accounts are not viable alternatives to sales through distributors. Rockfon also cites an Armstrong representative statement’s showing direct sales to contractors is not a viable option: “Rockfon in 2017 has been focusing on going directly to contractors to sell products. Will this be a sustainable strategy? We think not, as ceiling tile primarily is sold through the distribution network for a reason.”¹²⁵ Professor Elhaug testified manufacturers cannot viably sell through retailers like Home Depot because retailers do not provide the same “whole range of services” distributors provide.¹²⁶

While a jury could find lack of foreclosure based on the availability of alternative channels, we find Roxul has presented sufficient evidence from which a jury could find such channels were not feasible. We do not judge the strength of either party’s evidence but find a jury could decide whether alternative means are “practical” and would “pose[] a real threat” to Armstrong’s market share.¹²⁷

We are not persuaded by cases evaluating other strategies in other markets.

We are not similarly persuaded by the parties’ reliance on guidance from other markets and involving other competitive strategies. For example, while Rockfon cites *Dentsply*, the size of the competitors in the market differed significantly. In *Dentsply*, the defendant sold artificial teeth through dealers and prevented its dealers from carrying competitors’ products.¹²⁸ The

defendant threatened to cut off access to its products when a dealer considered adding another manufacturer's products.¹²⁹ Our Court of Appeals reversed the district court's finding competitors had access to alternative channels of distributions. It explained, while the defendant's competitors had access to hundreds of dealers, the defendant had exclusivity with twenty-three key dealers. The court noted "[t]he reality in this case is that the firm that ties up the key dealers rules the market."¹³⁰

The defendant maintained a substantial market share of seventy-five to eighty percent of the artificial teeth market, with the closest competitor achieving only five percent of the market.¹³¹ While Armstrong does not dispute it holds the largest share of the ceiling tile market, the next largest competitor—USG—holds a thirty-percent market share, significantly larger than five percent. Even CertainTeed, the third largest manufacturer, holds an eleven to fifteen percent market share.

Armstrong argues we cannot find substantial foreclosure because its exclusivity agreements do not harm all rivals, pointing to USG and CertainTeed's significant market shares. But to determine substantial foreclosure, we ask whether Armstrong's exclusivity agreements "bar a substantial number of rivals **or severely restrict the market's ambit.**"¹³² While the United States ceiling tile market has three established competitors, a new manufacturer had not successfully entered the market for thirty years before 2013. Rockfon argues it is a "maverick" firm with (1) more aggressive prices and (2) unique products.¹³³ Department of Justice Merger Guidelines instruct regulators ask whether a merger "may lessen competition by eliminating a 'maverick' firm, i.e., a firm that plays a disruptive role in the market to the benefit of costumers."¹³⁴ Elimination of a maverick under anti-trust law has the same ability to lessen competition. A jury could find while Armstrong's exclusivity agreements do not foreclose a substantial number of

rivals, exclusivity severely restricts the market's ambit by preventing a "maverick" like Rockfon from achieving a footing in the market.

The loyalty discount agreements in *Eisai* do not present the same anti-competitive conduct as Armstrong's exclusivity agreements. In *Eisai*, the defendant entered into agreements with hospitals offering incremental discounts if the hospitals purchased a certain percentage of its drugs from the defendant.¹³⁵ The defendant offered (1) a flat discount of one percent if a hospital purchased less than seventy-five percent of its drugs from the defendant and (2) discounts ranging from nine to thirty percent if the hospitals purchased over seventy-five percent of its drugs from the defendant.¹³⁶ While this incentivized purchasing the defendant's drugs, the hospitals "were not contractually obligated to do so."¹³⁷ If a hospital terminated the agreement, it could still buy the defendant's drugs at wholesale prices.¹³⁸

The district court granted summary judgment for the defendant on the plaintiff's Sherman and Clayton Act claims and our Court of Appeals affirmed. The plaintiff argued the hospitals lacked a meaningful choice to purchase the plaintiff's products, comparing the loyalty discount agreements to the exclusivity agreements in *ZF Meritor* and *Dentsply*. The Court of Appeals explained the defendant's anti-competitive conduct differed from the challenged conduct in those cases. If the hospitals did not achieve the seventy-five percent target, the defendant did not cut off supply to the hospital but merely offered the base one-percent discount. Even if the hospital terminated the agreement, it could still buy the defendant's drugs. The hospitals did not risk losing access to the defendant's products if they did not purchase seventy-five percent of its drugs from the defendant, or even chose to instead purchase the plaintiff's drugs. The court distinguished a case like *Dentsply* and *ZF Meritor*, where "the defendant threatened to refuse to continue dealing with customers if customers purchased rival's products."¹³⁹

Armstrong’s exclusivity agreements more closely resemble the exclusivity agreements in *Dentsply* and *ZF Meritor* than the loyalty discount agreements in *Eisai*. With the “No Rockfon” clause in its exclusivity agreements, Armstrong provided if the covered distributor purchases Rockfon tiles for resale in locations where the distributor did not sell Armstrong tiles, Armstrong could, “in its sole discretion (a) terminate [the] Agreement or any other distribution arrangement with any of them for cause.”¹⁴⁰ In other words, Armstrong could refuse to continue dealing with a distributor if it purchased Rockfon tiles. Armstrong’s exclusivity agreements do not present the same choice as the discount agreements in *Eisai* since distributors risked losing Armstrong’s products if they purchased Rockfon tiles.

Armstrong argues our case is like *Barr Laboratories v. Abbott Laboratories*, but the rebate agreements in *Barr* resemble the discount agreements in *Eisai*.¹⁴¹ In *Barr*, the defendant contracted with drugstores offering discounts if the drugstores purchased a certain volume of the defendant’s drugs.¹⁴² The defendant charged back the difference between the discounted and undiscounted price if the drugstore failed to purchase the target volume. The drugstores did not believe the defendant’s contracts precluded them from buying competitors’ drugs.¹⁴³ The plaintiff calculated (1) the defendant maintained a fifty-percent market share and (2) the defendant’s contracts foreclosed the plaintiff from fifteen percent of the market.¹⁴⁴ The district court granted summary judgment for the defendant and our Court of Appeals affirmed. The Court of Appeals held the district court did not err in concluding fifteen-percent foreclosure combined with other factors—the stability in the market and the emergence of new manufacturers—showed a lack of “substantial foreclosure.”¹⁴⁵

We find *Barr* distinguishable for several reasons. The contracts in *Barr* were essentially loyalty discount agreements. The defendant did not prohibit drugstores from carrying competitors’

products but rather only retracted a discount if the drugstore failed to purchase a target volume. The defendant in *Barr* did not include a provision allowing it to terminate the agreements if the drugstores carried a competitor's product, unlike the "No Rockfon" clause allowing Armstrong to terminate an agreement if the distributor carried Rockfon tiles. The plaintiff's foreclosure and market share calculations were significantly lower than the alleged foreclosure and market share attributed to Armstrong in our case. The district court in *Barr* also found the number of manufacturers in the market increased by twenty-three percent in the relevant six-year timeframe.¹⁴⁶ Here, before Rockfon, a new competitor has not entered the market for thirty years.

Rockfon adduced additional credible foreclosure evidence.

In addition to the unavailability of alternative channels for tile sales, Rockfon argues Armstrong's exclusivity agreements both quantitatively and qualitatively foreclosed it from growing in the suspended acoustical ceiling tile market in the United States.

To show quantitative foreclosure, Professor Elhauge defined the relevant market as sales of suspended acoustical ceiling tiles in the United States.¹⁴⁷ Roxul further breaks down the market into sixty-one geographical submarkets known as "Price Metros" where Armstrong can charge different prices for their tiles.¹⁴⁸ Professor Elhauge calculated, between 2014 and 2017, Armstrong foreclosed thirty-eight to forty-one percent of the United States market in terms of volume.¹⁴⁹ USG and Armstrong's exclusivity agreements together foreclosed approximately fifty-percent foreclosure.¹⁵⁰ Professor Elhauge further calculates after four years in the United States market, Rockfon has only achieved a two-percent market share.¹⁵¹

Professor Elhauge compared (1) Rockfon's unforeclosed distributors and (2) distributors foreclosed by Armstrong's exclusivity agreements. He determined Rockfon grew "significantly faster" among unforeclosed distributors when comparing foreclosed distributors and unforeclosed

distributors.¹⁵² He calculated between 2014 and 2017, Rockfon's market revenue share among foreclosed distributors did not grow at all, while its amongst unforeclosed customers increased from 0.8% in 2014 to 3.2% in 2017.¹⁵³ Professor Elhauge calculates in 2017, Rockfon's market share would have been 3.2% "but for" Armstrong's exclusivity agreements, as opposed to its actual market share of 1.9%.¹⁵⁴

To show qualitative foreclosure, Roxul presents evidence showing Armstrong's exclusivity agreements forced Roxul to use inferior distributors. A 2017 report from independent firm Simon-Kutcher shows Rockfon had access to lesser quality distributors than Armstrong. Simon-Kutcher rated distributors on a scale of one to five, weakest to strongest.¹⁵⁵ It concluded distributors foreclosed by Armstrong's exclusivity agreements rated on average 3.5, while unforeclosed distributors rated 2.2.¹⁵⁶ Roxul also points to evidence it had to rely on an insulation distributor with "lack of specialized [ceiling tile] knowledge and ceiling contractor relationships."¹⁵⁷

Armstrong argues Professor Elhauge inflated his foreclosure calculation because he included Armstrong's incontestable "repair and replace" jobs. With these jobs, contractors replace worn-out Armstrong tiles with new tiles. The building owners generally desire Armstrong replacement tiles to match the existing Armstrong tiles.¹⁵⁸ Armstrong argues its exclusivity agreements do not foreclose these sales since customer preference for the existing brand drives "repair and replace" sales. Armstrong cites deposition testimony showing the "repair and replace" sales account for sixty to eighty percent of ceiling tile sales, while accounting for only thirty to fifty percent of Rockfon's sales in the United States.¹⁵⁹ Armstrong argues Rockfon maintains a seven to fourteen percent share of non-"repair and replace" sales.¹⁶⁰

Rockfon responds "repair or replace" sales for Armstrong tiles account for only twenty-five percent of suspended acoustical ceiling tile sales in the United States.¹⁶¹ Rockfon also denies

incontestability since an Armstrong representative testified contractors can use ceiling tiles interchangeably; in other words, a contractor could use Rockfon tiles to replace existing Armstrong tiles in a building.¹⁶² Rockfon further argues “repair and replace” sales exacerbate the effect of exclusivity as distributors cannot forego exclusivity with Armstrong or switch to Rockfon tiles without losing access to “repair and replace” sales.¹⁶³

Armstrong also argues Rockfon’s growth in the United States negates substantial foreclosure. Armstrong cites to an internal Rockfon presentation from September 2016 showing Rockfon’s pace “to sell 28 million sqft of tile in 2016 which continues to be the fastest market introduction in Rockfon history.”¹⁶⁴ Armstrong cites another Rockfon presentation from 2016 claiming Rockfon “ha[s] a location selling tile in every major [metropolitan statistical area] in the U.S.”¹⁶⁵ In a February 2018 presentation, Rockfon stated it has “[d]istributors in every major market.”¹⁶⁶

Rockfon disputes the number of its distributors in the United States. Armstrong cites a Rockfon document showing it has “190+ distribution points,”¹⁶⁷ but Dr. Ordover at times testified Rockfon has either 136 or 170 distributors.¹⁶⁸ Rockfon also presents evidence Armstrong foreclosed it from accessing the best distributors, forcing Rockfon to rely on inferior distributors.¹⁶⁹ For example, Rockfon enlisted an insulation distributor because, as a Rockfon representative testified, “that was our only option after the changes that were forced on us through the Armstrong pressures.”¹⁷⁰

Armstrong also argues distributors preferred local production and Rockfon did not have a manufacturing plant in the United States until July 2017.¹⁷¹ Armstrong cites a May 2015 Rockfon report: “Distributors see local production as a necessary show of ROCKWOOL’s commitment to

the market. Without it, they will not take the risk of carrying ROCKFON as their sole ceilings brand.”¹⁷²

Armstrong cites a presentation from independent marketing consultant Simon-Kutcher stating “Rockfon can still compete successfully” in the United States.¹⁷³ Rockfon responds in the same presentation, Simon-Kutcher stated “[m]arket access is a valid concern,” as “[t]op customers in the North American markets are exclusive to a competitor.”¹⁷⁴

There are genuine issues of material fact as to whether Armstrong’s exclusivity agreements substantially foreclosed the market for suspended acoustical ceiling tiles. Rockfon offers expert testimony showing it would have grown faster but for Armstrong’s agreements. Professor Elhauge calculated Rockfon grew faster amongst unforeclosed customers than amongst foreclosed customers. Armstrong argues Professor Elhauge cannot attribute “repair and replace” sales to Armstrong’s exclusivity agreements, but Professor Elhauge responds “repair and replace” jobs exacerbate the effect of exclusivity. Armstrong points to Rockfon’s success in the United States market, Rockfon’s priority for increasing its specification position, and distributor preference for local production.

While Armstrong points to Rockfon’s success to show a lack of foreclosure, a new competitor’s entry into the market does not necessarily negate foreclosure. Armstrong cites *McWane v. FTC*.¹⁷⁵ In *McWane*, the Federal Trade Commission sued iron pipe fitting manufacturer McWane under Section 5 of the Federal Trade Commission Act. When a new rival attempted to enter the market, McWane, the dominant market participant, threatened its distributors if they purchased the new rival’s products, McWane would withhold rebates and deny access to its products for twelve weeks.¹⁷⁶ During the relevant timeframe, the rival’s market share grew ten percent, while McWane’s share shrank.

The defendant argued on appeal the Federal Trade Commission erred in finding “substantial foreclosure” under the rule of reason since the new rival entered the market and attained significant growth. The court of appeals affirmed the Commission, explaining other courts “have found monopolists liable for anticompetitive conduct where, as here, the targeted rival gained market share—but less than it likely would have absent the conduct.”¹⁷⁷ Citing *Dentsply* and *ZF Meritor*, the court explained “exclusive dealing measures that slow a rival’s expansion can still produce consumer injury.”¹⁷⁸ Rockfon argues it would have grown faster “but-for” Armstrong’s exclusivity agreements and presents Professor Elhauge’s calculations showing Roxul would have attained a higher market share “but for” Armstrong’s exclusivity.

While Armstrong argues anti-trust law does not entitle Rockfon to the “best” distributors, our Court of Appeals instructs we look at the quality of distributors when determining anti-competitive conduct. When discussing a monopolist’s anti-competitive conduct, the court provided an example of when a monopolist’s exclusive dealing is illegal:

[S]uppose an established manufacturer has long held a dominant position but is starting to lose market share to an aggressive young rival. A set of strategically planned exclusive-dealing contracts may slow the rival’s expansion by requiring it to develop alternative outlets for its product, or rely at least temporarily on inferior or more expensive outlets. Consumer injury results from the delay that the dominant firm imposes on the smaller rival’s growth.¹⁷⁹

Assuming Rockfon proves Armstrong a monopolist, a jury could find because Armstrong’s exclusivity agreements, coupled with the agreements containing the “No Rockfon” clause, forced Rockfon to use inferior distributors, such agreements substantially foreclosed Rockfon from the market.

While Rockfon’s growth may be relevant to “substantial foreclosure,” a jury must decide whether Armstrong’s exclusivity agreements prevent Rockfon from ever attaining “‘the critical level necessary’ to pose a real threat to [Armstrong]’s business.”¹⁸⁰

2. We find a genuine issue of fact as to Armstrong's market power.

Roxul must show “significant market power by the defendant[.]”¹⁸¹ For monopolization claims under Section 2 of the Sherman Act in particular, Rockfon must establish Armstrong (1) possessed monopoly power and (2) maintained monopoly power “as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.”¹⁸²

a. The parties dispute whether Armstrong possesses monopoly power.

“Monopoly power is the ability to control prices and exclude competition in a given market.”¹⁸³ We infer “monopoly power” from “a predominant share of the market, and the size of that portion is a primary factor in determining whether power exists.”¹⁸⁴ Our Court of Appeals determined a market share “significantly larger than 55%” establishes the requisite predominant market share.¹⁸⁵ In the event a defendant has less than a predominant market share, a plaintiff can establish monopoly power with other factors, including “the size and strength of competing firms, freedom of entry, pricing trends and practices in the industry, ability of consumers to substitute comparable goods, and consumer demand.”¹⁸⁶

Rockfon argues monopoly power based on Armstrong's share of the market. Professor Elhauge found Armstrong maintains “an overall revenue share of 61-62% and an overall average square-foot share of 55-56% from 2013-2017.”¹⁸⁷ With respect to Armstrong's distribution network, Rockfon points to evidence showing Armstrong has “over 15% more distribution points than the number two player which approximates to 900 distributor representatives.”¹⁸⁸

Rockfon argues Armstrong's market share combined with factors like exclusivity agreements, the need for a domestic manufacturing plant,¹⁸⁹ economies of scale,¹⁹⁰ and patent protection¹⁹¹ allow a jury to find Armstrong possesses monopoly power in the United States.¹⁹²

Professor Elhauge also testified “repair and replace” jobs give Armstrong a significant

market power and present a barrier for new entrants to the market.¹⁹³ Professor Elhauge argues because Armstrong knows contractors working “repair and replace” jobs demand Armstrong tiles to replace existing Armstrong tiles, it can charge higher prices for these sales.¹⁹⁴ Professor Elhauge also explains Armstrong charges thirty percent more for its Optima and Ultima line of ceiling tiles than Rockfon’s comparable Sonar and Alaska db lines.¹⁹⁵ Dr. Ordover testified through discounts, Armstrong charged below its list price for thirty-four to fifty-one percent of its sales.¹⁹⁶

Armstrong cites evidence showing it has only 355 distribution locations and 109 outside sales representatives in the United States.¹⁹⁷ Armstrong argues market share is properly measured by volume of sales and Professor Elhauge measured Armstrong’s market share as fifty-three and fifty-five percent by volume.¹⁹⁸ Dr. Ordover testified Professor Elhauge excluded smaller ceiling tile manufacturers like OWA, Top Tile, and Sky Acoustics when he calculated Armstrong’s market share.¹⁹⁹ Armstrong argues Professor Elhauge acknowledged these smaller companies “collectively achieved a 4% market share of tile and grid sales in North America.”²⁰⁰ Dr. Ordover also found between 2013 and 2017, Armstrong had less than a fifty-percent market share in twenty five of the Pricing Metros.²⁰¹ Armstrong argues even assuming a sixty-percent market share, our Court of Appeals has never recognized a defendant with a sixty-percent market share as a monopolist in an anti-trust case.

While Armstrong argues we cannot find it a monopolist with only a sixty-percent market share, this is not the law. Our Court of Appeals determined a plaintiff establishes predominant market share with “significantly larger than 55%.”²⁰² A plaintiff can show monopoly power even with a showing of less than fifty-five percent by pointing to other relevant factors like barriers to entry.²⁰³ The ultimate test is whether Armstrong has “the ability to control prices and exclude competition in a given market.”²⁰⁴

The parties raise a genuine issue of fact as to Armstrong's market share. A reasonable jury could credit Professor Elhauge's calculation of market share. Rockfon points to several other relevant factors from which a jury could conclude Armstrong possesses monopoly power, including the need for a domestic plant, economies of scale, patent protection, and the significant share of "repair and replace" jobs, all showing barriers to entry into the United States market.

b. A jury must determine whether Armstrong used monopoly power to foreclose competition.

Under the second element of the Section 2 claims, Rockfon must show Armstrong maintained monopoly power "as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident."²⁰⁵ In other words, Rockfon must prove Armstrong used its monopoly power "to foreclose competition."²⁰⁶ "Unlawful maintenance of a monopoly is demonstrated by proof that a defendant has engaged in anti-competitive conduct that reasonably appears to be a significant contribution to maintaining monopoly power."²⁰⁷

Rockfon argues Armstrong has the power to exclude rivals from the market. Rockfon cites Armstrong's dealings with Acousti and CEMEX, showing Armstrong pressured contractors and distributors to refrain from carrying Rockfon tiles.²⁰⁸ Professor Elhauge opined Armstrong charges higher prices for its tiles than its smaller competitors and can charge prices because of its significant market share.²⁰⁹ Rockfon also argues Armstrong's ability to insert the "No Rockfon" clause in agreement without consideration demonstrates its power to exclude rivals.

Armstrong argues it does not have the ability to exclude rivals from the market. Dr. Ordovery opined Armstrong cannot exclude rivals, pointing to (1) Rockfon's entry into the market and growth, achieving an approximately two-percent share of the United States market after four years, and (2) the existence of two formidable competitors, USG and CertainTeed, holding a thirty and fifteen percent market share respectively.²¹⁰ Dr. Ordovery also found Armstrong charged higher

prices due to rising demand, higher costs, and Armstrong marketing higher quality product.²¹¹ Armstrong also argues its distributors received consideration in return for inclusion of the “No Rockfon” clause, namely, the ability to carry Armstrong tiles at new distributor locations acquired by the larger distributor.²¹²

Professor Elhauge responds Dr. Ordovery’s claim of Rockfon’s growth showing Armstrong’s inability to exclude rivals is misleading. He argues to determine whether Armstrong excluded Rockfon, we “compare [Rockfon’s] actual growth to an estimate of how they would have grown but-for the [anticompetitive] conduct.”²¹³ Professor Elhauge calculates in 2017, Rockfon’s market share would have been 3.2% “but for” Armstrong’s exclusivity agreements, as opposed to its actual market share of 1.9%.²¹⁴

We find a genuine issue of material fact as to whether Armstrong used monopoly power to exclude rivals. Rockfon presents evidence Armstrong charges higher prices for its products, despite Rockfon offering comparable products. Armstrong presents evidence it charged higher prices due to rising demand, higher costs, and higher quality products. A jury must decide whether Armstrong can exclude rivals.

3. We find genuine issues of material fact on whether Armstrong’s exclusivity agreements were of sufficient duration to prevent meaningful competition by rivals.

Roxul must show Armstrong’s exclusivity agreements were “of sufficient duration to prevent meaningful competition by rivals.”²¹⁵ Long-term exclusivity agreements are not *per se* unlawful, but “[t]he significance of any particular contract duration is a function of both the number of such contracts and market share covered by the exclusive-dealing contracts.”²¹⁶ In *ZF Meritor*, our Court of Appeals held exclusivity agreements with five to seven year terms with every purchaser, foreclosing eighty-five percent of the market, showed the agreements prevented

meaningful competition.²¹⁷ Agreements less than one year, on the other hand, are presumptively lawful.²¹⁸

Armstrong argues its exclusivity agreements last three years.²¹⁹ Armstrong further argues it did not have exclusivity agreements with all of its distributors, citing its agreements with Marjam, Kamco, and Contractors Choice Supply.²²⁰ Rockfon argues while its written exclusivity agreements list terms of three years, Armstrong had “verbal understandings” with its distributors exclusivity would last indefinitely, citing an email between Armstrong representatives from 2014.²²¹ Rockfon also cites an Armstrong representative’s testimony showing Armstrong has exclusivity agreements with all of its distributors.²²²

Rockfon adduces credible evidence creating genuine issues of material fact as to the duration of the exclusivity agreements. Combined with evidence of Armstrong’s share of the market, a reasonable jury could credit Rockfon’s evidence and decide Armstrong’s exclusivity agreements prevent meaningful competition by its rivals.

4. We find a genuine issue of fact as to procompetitive benefits and anti-competitive effects of Armstrong’s exclusivity agreements.

Our Court of Appeals instructs we perform “an analysis of likely or actual anticompetitive effects considered in light of any procompetitive effects.”²²³ Armstrong argues its exclusivity agreements have only procompetitive benefits because the agreements prevent competitors from free-riding on its investments in its distributors.

Dr. Ordover opined exclusive dealing arrangements have procompetitive benefits: “[W]herein a distributor sells only or primarily the products of a single manufacturer can incentivize investments in a brand and increase competition among brands even if competition among distributors of the same brand is restricted.”²²⁴ He also opined exclusive dealing between a distributor and a manufacturer prevents a rival manufacturer from “free-riding” on the

manufacturer's investment in the distributor.²²⁵ Armstrong invests in its distributors by (1) sharing job opportunities in the distributor's sales territory, and (2) developing "Action Plans" to help distributors grow and improve their business.²²⁶ Armstrong also provides training courses for its distributors on "general sales and marketing methods" and "inventory management."²²⁷ Dr. Ordover testified Roxul could "free ride" on Armstrong's investments by using its distributors. While acknowledging the exclusivity agreements in this case prevent distributors from selling Rockfon products even in areas where the distributor does not sell Armstrong products, Dr. Ordover argues Rockfon could still take advantage of Armstrong's investments when distributor employees trained by Armstrong move locations.²²⁸ Armstrong also enacted the "Gold Circle" program to provide rebates for its exclusive distributors based on sales figures.²²⁹

While acknowledging exclusivity can produce procompetitive benefits, Rockfon argues Armstrong's exclusive agreements have no procompetitive benefits. Rockfon also argues Armstrong overstates its investment in its distributors. Professor Elhauge found Armstrong offers its distributors only one "manufacturer agnostic" training course—a course not specific to Armstrong's products.²³⁰ He explained Rockfon could only potentially "free-ride" on this course since it does not pertain only to Armstrong's products. He explained the training course was highly selective and Armstrong charges attendants \$1,500 for the class.²³¹ Professor Elhauge explains Rockfon similarly invests in its distributors even without exclusivity agreements.²³² He found Rockfon offered greater rebates to its customers than Armstrong.²³³ He also explains exclusivity reduces investments in a distributor since a firm like Armstrong with an exclusivity agreement does not have to compete with rivals.²³⁴ He further opined any increased investment provides no benefit to the ultimate consumers of the tiles.²³⁵

We find a genuine issue of fact as to whether Armstrong’s exclusivity agreements provide procompetitive benefits. Armstrong offers evidence its exclusivity agreements provide procompetitive benefits by preventing “free-riding” on its distributor investments. Rockfon offers evidence showing the exclusivity agreements do not offer procompetitive benefits because Armstrong overstates the impact of its investments. Rockfon also offers evidence it invests in its distributors even without exclusivity. A jury must decide whether Armstrong’s exclusivity agreements offer any procompetitive benefits.

5. We find a genuine issue of material fact as to whether Armstrong coerced customers into accepting exclusivity.

We consider “whether there is evidence that the dominant firm engaged in coercive behavior.”²³⁶

Rockfon cites evidence showing Armstrong coerced its distributors into accepting the “No Rockfon” Clause. Frank Salters, a former manager with Armstrong’s distributor CEMEX, attended a meeting with Armstrong representatives in 2014.²³⁷ During the meeting, an Armstrong representative told him if CEMEX carried Rockfon products, even in areas where CEMEX did not sell Armstrong products, “it could affect the distribution position with Armstrong in the markets that they had the line.”²³⁸ Mr. Salters understood this to mean CEMEX would lose Armstrong’s business if it tried to sell Rockfon products.²³⁹ Ms. Hart, a Rockfon sale representative, talked to a representative from the distributor Kamco in Connecticut.²⁴⁰ The Kamco representative told her Kamco would not let him place an order with Rockfon because Kamco “didn’t want to jeopardize [its] relationship with Armstrong.”²⁴¹

Armstrong argues it did not coercively prevent its distributors from carrying the Rockfon line. Armstrong argues its distributors wanted to carry the Armstrong line and willingly entered into its exclusivity agreements. The president of Hughes Industries, one of Armstrong’s

distributors, testified he preferred Armstrong over Rockfon because “[i]t’s a name brand, it’s already accepted . . . it’s the premier line to have.”²⁴² In cases where a larger distributor acquired a smaller distributor, Armstrong argues the larger distributor received the ability to transfer the Armstrong line to the newly acquired distributor in return for applying the “No Rockfon” clause to the acquired distributor.²⁴³

While Armstrong offers evidence its distributors willingly entered into exclusivity agreements, a reasonable jury could find Armstrong enforced its exclusivity agreements with coercion, thus creating an anti-competitive effect.²⁴⁴ Rockfon offers evidence showing CEMEX felt threatened it would lose business if it sold Rockfon tiles.²⁴⁵

6. We find a genuine issue of material fact as to competitors’ use of exclusive dealing.

We also ask whether Armstrong’s competitors used exclusive dealing agreements.²⁴⁶ Rockfon presents evidence USG has exclusivity agreements with distributors. Armstrong offers evidence showing Rockfon has exclusivity agreements with distributors. Rockfon responds it briefly had an exclusivity agreement with a distributor but no longer has exclusivity with any distributor.²⁴⁷

The parties’ evidence of competitors’ exclusivity agreements does not warrant summary judgment. A jury can consider this evidence in determining whether Armstrong’s use of exclusivity agreements violates anti-trust laws.

7. We find a genuine issue of material fact as to whether Armstrong’s exclusivity agreement caused an anti-trust injury.

We also ask whether Armstrong’s exclusivity agreements caused anti-trust injury.²⁴⁸ We ask whether the plaintiff’s “loss stems from a competition-reducing aspect or effect of the defendant’s behavior.”²⁴⁹ In *ZF Meritor*, our Court of Appeals found sufficient evidence existed

the defendant's exclusive dealing agreements foreclosed a substantial share of the market for truck transmission and the plaintiff exited the market because it could not maintain a "high enough market shares to remain viable."²⁵⁰ Because of such foreclosure evidence, the court found a jury could conclude the plaintiff's "inability to grow was a direct result of [the defendant]'s exclusionary conduct."²⁵¹

Rockfon offers evidence from which a jury could conclude foreclosure limited Rockfon's ability to grow. Professor Elhauge calculated between 2014 and 2017, Rockfon grew faster amongst "unforeclosed" customers than amongst foreclosed customers bound by Armstrong's exclusivity agreements.²⁵² Further, Professor Elhauge found Rockfon would have achieved a 1.3% greater market share in the absence of Armstrong's exclusivity agreements.²⁵³ A jury could find Armstrong's exclusivity agreements caused Rockfon's inability to grow and thus caused an anti-trust injury.

B. We deny Rockfon's Motion as there are genuine issues of material fact on whether the "No Rockfon" clause is a naked restraint.

Rockfon argues Armstrong's "No Rockfon" clause is a naked restraint under Section 3 of the Clayton Act, with no other purpose than preventing Armstrong distributors from carrying Rockfon tiles. A naked restraint has "no purpose except (the) stifling of competition."²⁵⁴ As explained, Armstrong adduces evidence it instituted the "No Rockfon" clause to prevent free-riding, an acknowledged procompetitive benefit.²⁵⁵ Armstrong raises a genuine issue of fact as to whether the "No Rockfon" clause is a naked restraint. We deny Rockfon's motion for summary judgment under Section 3 of the Clayton Act.

III. Conclusion.

In an accompanying Order, we deny (1) Rockfon's motion for summary judgment on its claim under Section 3 of the Clayton Act limited to the "No Rockfon" clause and (2) Armstrong's

motion for summary judgment on Rockfon’s claims under Section 1 and 2 of the Sherman Act, and Section 3 of the Clayton Act.

¹ Our Policies and Procedures require a Statement of Undisputed Material Facts (“SUMF”) and an appendix in support of summary judgment. Roxul filed its initial SUMF (“Roxul SUMF”) at ECF Doc. No. 207 and its memorandum in support of summary judgment at ECF Doc. No. 206. Armstrong filed its SUMF (“Armstrong SUMF”) at ECF Doc. No. 209 and its memorandum at ECF Doc. No. 208. The parties filed a Joint Appendix (“Joint App.”) in support of their motions for summary judgment at ECF Doc. No. 201. Roxul filed its opposition memorandum at ECF Doc. No. 242 and its response SUMF (“Roxul Response SUMF”) at ECF Doc. No. 243. Armstrong filed its opposition memorandum at ECF Doc. No. 237 and its response SUMF (“Armstrong Response SUMF”) at ECF Doc. No. 238. The parties filed a supplement to the Joint Appendix in support of their oppositions at ECF Doc. No. 239. Rockfon filed its reply to Armstrong’s opposition at ECF Doc. No. 253 and Armstrong filed its reply at ECF Doc. No. 254. The parties filed a second supplement to the Joint Appendix in support of their replies at ECF Doc. No. 258. We cite to the Joint Appendix referencing the Bates number (e.g. JA0001).

² ECF Doc. No. 209 (Armstrong SUMF) ¶ 1.

³ *Id.* at ¶ 3.

⁴ *Id.* at ¶ 2.

⁵ *Id.*

⁶ *Id.* at ¶ 7.

⁷ *Id.*; ECF Doc. No. 243 (Roxul Response SUMF) ¶ 7.

⁸ ECF Doc. No. 209 (Armstrong SUMF) ¶ 107.

⁹ *Id.* at ¶ 108.

¹⁰ ECF Doc. No. 243 (Roxul Response SUMF) ¶ 109.

¹¹ ECF Doc. No. 209 (Armstrong SUMF) ¶ 109.

¹² *Id.* at ¶ 110.

¹³ *Id.* at ¶ 38.

¹⁴ *Id.* at ¶ 113; ECF Doc. No. 243 (Roxul Response SUMF) ¶ 113.

¹⁵ ECF Doc. No. 201 (Joint App.), at JA6794 (Elhauge Report).

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- ¹⁶ ECF Doc. No. 209 (Armstrong SUMF) ¶ 4.
- ¹⁷ ECF Doc. No. 243 (Roxul Response SUMF) ¶ 133.
- ¹⁸ ECF Doc. No. 209 (Armstrong SUMF) ¶ 13; ECF Doc. No. 243 (Roxul Response SUMF) ¶¶ 105, 124.
- ¹⁹ ECF Doc. No. 201 (Joint App.), at JA6717 (Elhauge Report).
- ²⁰ ECF Doc. No. 209 (Armstrong SUMF) ¶ 21.
- ²¹ *Id.* at ¶ 22.
- ²² ECF Doc. No. 201 (Joint App.), at JA0056.
- ²³ ECF Doc. No. 209 (Armstrong SUMF) ¶ 31; ECF Doc. No. 243 (Roxul Response SUMF) ¶ 31.
- ²⁴ ECF Doc. No. 201 (Joint App.), at JA6813 (Elhauge Report).
- ²⁵ *Id.* at JA0197.
- ²⁶ *Id.* at JA0216 (Ducker Report).
- ²⁷ *Id.*
- ²⁸ ECF Doc. No. 209 (Armstrong SUMF) ¶ 49; ECF Doc. No. 243 (Roxul Response SUMF) ¶ 49.
- ²⁹ ECF Doc. No. 201 (Joint App.), at JA2398 (Rockfon SD Growth Plan, June 2016).
- ³⁰ ECF Doc. No. 243 (Roxul Response SUMF) ¶ 51.
- ³¹ ECF Doc. No. 209 (Armstrong SUMF) ¶ 55.
- ³² ECF Doc. No. 239 (Joint App.), at JA8033 (N.T. R. Lay, Aug. 14, 2018).
- ³³ ECF Doc. No. 209 (Armstrong SUMF) ¶ 6.
- ³⁴ *Id.*
- ³⁵ ECF Doc. No. 201 (Joint App.), at JA1693.
- ³⁶ *Id.* at JA0603, JA5041.
- ³⁷ *Id.* at JA0603.

³⁸ ECF Doc. No. 201 (Joint App.), at JA1374.

³⁹ *Id.*

⁴⁰ ECF Doc. No. 207 (Roxul SUMF) ¶ 6.

⁴¹ *Id.* at ¶ 10.

⁴² ECF Doc. No. 209 (Armstrong SUMF) ¶ 35.

⁴³ *Id.* at ¶ 39.

⁴⁴ ECF Doc. No. 207 (Roxul SUMF) ¶ 13.

⁴⁵ *Id.*

⁴⁶ ECF Doc. No. 201 (Joint App.), at JA6139.

⁴⁷ *Id.* at JA1371-72.

⁴⁸ *Id.* at JA6140.

⁴⁹ *Id.* at JA5986.

⁵⁰ *Id.*

⁵¹ *Id.*

⁵² ECF Doc. No. 209 (Armstrong SUMF) ¶ 100.

⁵³ *Id.* at ¶ 101; ECF Doc. No. 243 (Roxul Response SUMF) ¶ 101.

⁵⁴ ECF Doc. No. 209 (Armstrong SUMF) ¶ 104.

⁵⁵ ECF Doc. No. 239 (Joint App.), at JA8045-46 (N.T. S. Noeth, Aug. 23, 2018).

⁵⁶ ECF Doc. No. 209 (Armstrong SUMF) ¶ 92.

⁵⁷ *Id.* at ¶ 95.

⁵⁸ *Id.* at ¶ 96.

⁵⁹ ECF Doc. No. 243 (Roxul Response SUMF) ¶ 99.

⁶⁰ ECF Doc. No. 201 (Joint App.), at JA3300-54.

⁶¹ *Id.* at JA3361.

⁶² *Id.* at JA6713 (Elhaug Report).

⁶³ *Id.* at JA7200 (Elhaug Rebuttal Report).

⁶⁴ *Id.* at JA6718 (Elhaug Report).

⁶⁵ *Id.*

⁶⁶ *Id.* at JA6744 (Elhaug Report).

⁶⁷ *Id.* at JA6757 (Elhaug Report).

⁶⁸ *Id.*

⁶⁹ *Id.* at JA6823 (Elhaug Report).

⁷⁰ *Id.*

⁷¹ *Id.* at JA6718 (Elhaug Report).

⁷² *Id.* at JA6841 (Elhaug Report).

⁷³ *Id.*

⁷⁴ *Id.* at JA6854 (Elhaug Report).

⁷⁵ *Id.* at JA6859 (Elhaug Report).

⁷⁶ *Id.* at JA6857 (Elhaug Report).

⁷⁷ *Id.* at JA6867 (Elhaug Report).

⁷⁸ *Id.* at JA6907 (Ordover Report).

⁷⁹ *Id.* at JA6913 (Ordover Report).

⁸⁰ *Id.* at JA7279 (Ordover Rebuttal Report).

⁸¹ *Id.* at JA7280; *Id.* at JA0216 (Ducker reported assuming a “solid distribution network established upfront,” Rockfon could “capture up to 3% of the overall suspended ceiling market” in five years.).

⁸² *Id.* at JA6943 (Ordover Report).

⁸³ *Id.* at JA6945 (Ordover Report).

⁸⁴ *Id.* at JA6951 (Ordoover Report).

⁸⁵ Summary judgment is proper when “the movant shows that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law.” Fed. R. Civ. P. 56(a). “Material facts are those ‘that could affect the outcome’ of the proceeding, and ‘a dispute about a material fact is ‘genuine’ if the evidence is sufficient to permit a reasonable jury to return a verdict for the non-moving party.’” *Pearson v. Prison Health Serv.*, 850 F.3d 526, 534 (3d Cir. 2017) (quoting *Lamont v. New Jersey*, 637 F.3d 177, 181 (3d Cir. 2011)). On a motion for summary judgment, “we view the facts and draw all reasonable inferences in the light most favorable to the nonmovant.” *Pearson*, 850 F.3d at 533-34 (3d Cir. 2017) (citing *Scott v. Harris*, 550 U.S. 372, 378 (2007)). “The party seeking summary judgment ‘has the burden of demonstrating that the evidentiary record presents no genuine issue of material fact.’” *Parkell v. Danberg*, 833 F.3d 313, 323 (3d Cir. 2016) (quoting *Willis v. UPMC Children’s Hosp. of Pittsburgh*, 808 F.3d 638, 643 (3d Cir. 2015)). If the movant carries its burden, “the nonmoving party must identify facts in the record that would enable them to make a sufficient showing on essential elements of their case for which they have the burden of proof.” *Willis*, 808 F.3d at 643 (citing *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986)). “If, after adequate time for discovery, the nonmoving party has not met its burden, pursuant to Federal Rule of Civil Procedure 56, the court must enter summary judgment against the nonmoving party.” *Willis*, 808 F.3d at 643 (citing *Celotex Corp.*, 477 U.S. at 322-323).

⁸⁶ We dismissed Roxul’s state law claim for tortious interference with business relations and eliminated Roxul’s claims concerning the Canadian market for lack of jurisdiction. ECF Doc. No. 15.

⁸⁷ *Eisai, Inc. v. Sanofi Aventis U.S., LLC*, 821 F.3d 394, 403 (3d Cir. 2016) (citing *ZF Meritor, LLC v. Eaton Corp.*, 696 F.3d 254, 269 n.9 (3d Cir. 2012)).

⁸⁸ *ZF Meritor*, 696 F.3d at 270.

⁸⁹ *Insight Equity A.P. X, LP v. Transitions Optical, Inc.*, No. 10-635, 2016 WL 3610155, at *4 (D. Del. July 1, 2016) (citing *ZF Meritor*, 696 F.3d at 281).

⁹⁰ *ZF Meritor*, 696 F.3d at 281 (“The rule of reason governs Plaintiffs’ claims under Section 1 and Section 2 of the Sherman Act, and Section 3 of the Clayton Act.”).

⁹¹ *Id.* at 271 (quoting *Tampa Elec. Co. v. Nashville Coal Co.*, 365 U.S. 320, 328 (1961)).

⁹² *Id.*

⁹³ *Id.* at 271-72.

⁹⁴ *Insight Equity*, 2016 WL 3610155, at *6 (quoting *Omega Envtl., Inc. v. Gilbarco, Inc.*, 127 F.3d 1157, 1163 (9th Cir. 1997)).

⁹⁵ *ZF Meritor*, 696 F.3d at 272.

⁹⁶ *Id.*

⁹⁷ *Eisai*, 821 F.3d at 403 (quoting *United States v. Microsoft Corp.*, 253 F.3d 34, 69 (D.C. Cir. 2001)).

⁹⁸ *Id.* (quoting *United States v. Dentsply Int'l, Inc.*, 399 F.3d 181, 191 (3d Cir. 2005)).

⁹⁹ *Id.* (citing *Se. Missouri Hosp. v. C.R. Bard, Inc.*, 642 F.3d 608, 616 (8th Cir. 2011)).

¹⁰⁰ *ZF Meritor*, 696 F.3d at 286 (quoting *Dentsply*, 399 F.3d at 191).

¹⁰¹ *Eisai*, 821 F.3d at 404 (quoting *ZF Meritor*, 696 F.3d at 285).

¹⁰² *McWane, Inc. v. F.T.C.*, 783 F.3d 814, 837 (11th Cir. 2015) (citing *Microsoft*, 253 F.3d at 70).

¹⁰³ *Insight Equity*, 2016 WL 3610155, at *6 (quoting *Omega*, 127 F.3d at 1163).

¹⁰⁴ *GN Netcom, Inc. v. Plantronics, Inc.*, 278 F. Supp. 3d 824, 829 (D. Del. 2017) (quoting *Dentsply*, 399 F.3d at 193) (explaining the court performs an “assessment of [the alternative means]’ overall significance to the market,” and such alternative means must be “practical or feasible in the market as it exists and functions”).

¹⁰⁵ *Dentsply*, 399 F.3d at 181.

¹⁰⁶ *GN Netcom*, 278 F. Supp. 3d at 824.

¹⁰⁷ *Id.* at 826.

¹⁰⁸ *Id.* at 830.

¹⁰⁹ *Id.* at 827.

¹¹⁰ *Id.* at 828.

¹¹¹ *Id.*

¹¹² *Id.* at 830.

¹¹³ *Id.*

¹¹⁴ *Id.* at 831.

¹¹⁵ Roxul argues architects make the final decision regarding tile brand, citing *Santana Prod., Inc. v. Bobrick Washroom Equip., Inc.* 401 F.3d 123 (3d Cir. 2005). In *Santana*, our Court of Appeals, evaluating the toilet partition market, found “architects who would make the ultimate decision of which product to specify for use in a particular project.” *Id.* at 133. Both the market and the

challenged conduct were significantly different than here. The parties here agree as to the ultimate decision made by the contractor. They dispute the architect's dispositive role. In *Santana*, the plaintiff challenged the defendant's marketing statements to customers. We are not addressing marketing statements. The parties in *Santana* sold toilet partitions. We have disputed evidence as to the role of architects. We cannot simply transfer the realities of one market to another. Each market requires a fact-sensitive analysis.

¹¹⁶ ECF Doc. No. 201 (Joint App.), at JA2398 (Rockfon SD Growth Plan, June 2016).

¹¹⁷ *Id.* at JA6927 (Ordover Report).

¹¹⁸ *Id.* at JA6928 (Ordover Report).

¹¹⁹ ECF Doc. No. 207 (Roxul SUMF) ¶ 123.

¹²⁰ ECF Doc. No. 201 (Joint App.), at JA6794 (Elhauge Report).

¹²¹ ECF Doc. No. 239 (Joint App.), at JA8225 (N.T. E. Elhauge, Jan. 14, 2019).

¹²² ECF Doc. No. 201 (Joint App.), at JA5986.

¹²³ *Id.* at JA6799 (Elhauge Report).

¹²⁴ *Id.* at JA6778 (Elhauge Report).

¹²⁵ ECF Doc. No. 239 (Joint App.), at JA7910 (Thompson Research Group Report on U.S. Ceiling Tile Market).

¹²⁶ ECF Doc. No. 201 (Joint App.), at JA6781 (Elhauge Report).

¹²⁷ *GN Netcom*, 278 F. Supp. 3d at 831 (quoting *Dentsply*, 399 F.3d at 193).

¹²⁸ *Dentsply*, 399 F.3d at 185.

¹²⁹ *Id.* at 190.

¹³⁰ *Id.*

¹³¹ *Id.* at 188.

¹³² *Eisai*, 821 F.3d at 403 (quoting *Dentsply*, 399 F.3d at 191) (emphasis added).

¹³³ ECF Doc. No. 201 (Joint App.), at JA6790-01 (Elhauge Report).

¹³⁴ Dep't of Justice and the Fed. Trade Comm'n, Horizontal Merger Guidelines (Aug. 19, 2010).

¹³⁵ *Eisai*, 821 F.3d at 394.

¹³⁶ *Id.* at 400.

¹³⁷ *Id.*

¹³⁸ *Id.*

¹³⁹ *Id.* (quoting *ZF Meritor*, 696 F.3d at 278).

¹⁴⁰ ECF Doc. No. 201 (Joint App.), at JA1374.

¹⁴¹ *Barr Labs., Inc. v. Abbott Labs.*, 978 F.2d 98 (3d Cir. 1992).

¹⁴² *Id.* at 104.

¹⁴³ *Id.* at 105.

¹⁴⁴ *Id.*

¹⁴⁵ *Id.* at 111.

¹⁴⁶ *Id.* at 103.

¹⁴⁷ ECF Doc. No. 201 (Joint App.), at JA6718 (Elhauge Report). At the motion to dismiss stage, we limited the case to the United States market and excluded Canadian market.

¹⁴⁸ *Id.*

¹⁴⁹ *Id.* at JA6823 (Elhauge Report).

¹⁵⁰ *Id.*

¹⁵¹ *Id.* at JA6784 (Elhauge Report).

¹⁵² *Id.* at JA6839; JA6841 (Elhauge Report) (finding 0.1% growth or less from 2014-17 among customers foreclosed by Armstrong's exclusivity and 0.8% growth among unforeclosed customers).

¹⁵³ *Id.* at JA6841 (Elhauge Report).

¹⁵⁴ *Id.*

¹⁵⁵ *Id.* at JA7210 (Elhauge Rebuttal Report).

¹⁵⁶ *Id.*

¹⁵⁷ *Id.*

¹⁵⁸ *Id.* at JA6782 (Elhauge Report).

¹⁵⁹ *Id.* at JA6196-97 (N. T. J. Medio, Nov. 6, 2018) (“But I’ve seen estimates from our competitors in their publicly available documents that it’s anywhere from 60 to 80 percent of the demand.”).

¹⁶⁰ ECF Doc. No. 209 (Armstrong SUMF) ¶ 10.

¹⁶¹ ECF Doc. No. 201 (Joint App.), at JA6799 (Elhauge Report).

¹⁶² ECF Doc. No. 239 (Joint App.), at JA8030-31 (N.T. R. Lay, Aug. 14, 2018).

¹⁶³ ECF Doc. No. 201 (Joint App.), at JA7223-24 (Elhauge Rebuttal Report).

¹⁶⁴ *Id.* at JA2454.

¹⁶⁵ *Id.* at JA7267 (Ordover Rebuttal Report).

¹⁶⁶ *Id.* at JA3938.

¹⁶⁷ *Id.* at JA1830 (“Strategy for ROCKFON tiles in North America”).

¹⁶⁸ *Id.* at JA6934 (finding 136 distributors); JA7268 (173 distribution locations).

¹⁶⁹ *Id.* at JA7210 (Elhauge Rebuttal Report) (finding the “average distributor strength (rate 1-5, weakest to strongest) was 3.5 for foreclosed distributors but only 2.2 for accessible distributors, confirming that the foreclosure forced Rockfon to turn to less efficient distributors”).

¹⁷⁰ ECF Doc. No. 239 (Joint App.), at JA8045-46 (N.T. S. Noeth, Aug. 23, 2018).

¹⁷¹ ECF Doc. No. 201 (Joint App.), at JA6924-25.

¹⁷² *Id.* at JA1693.

¹⁷³ *Id.* at JA3361.

¹⁷⁴ *Id.*

¹⁷⁵ *McWane*, 783 F.3d at 814.

¹⁷⁶ *Id.* at 819.

¹⁷⁷ *Id.* at 838.

¹⁷⁸ *Id.*

¹⁷⁹ *ZF Meritor*, 696 F.3d at 271 (quoting Phillip Areeda & Herbert Hovenkamp, *Antitrust Law* ¶ 1802c, at 64 (2d ed. 2002)).

¹⁸⁰ *Id.* at 286 (quoting *Dentsply*, 399 F.3d at 191).

¹⁸¹ *Id.* at 271.

¹⁸² *Dentsply*, 399 F.3d at 187 (quoting *Eastman Kodak Co. v. Image Tech. Servs., Inc.*, 504 U.S. 451, 480 (1992))

¹⁸³ *Broadcom Corp. v. Qualcomm Inc.*, 501 F.3d 297, 307 (3d Cir. 2007).

¹⁸⁴ *Dentsply*, 399 F.3d at 187 (internal citations omitted) (citing *United States v. Grinnell Corp.*, 384 U.S. 563, 571 (1966)).

¹⁸⁵ *Id.*

¹⁸⁶ *Id.* (citing *Tampa Elec. Co.*, 365 U.S. at 320).

¹⁸⁷ ECF Doc. No. 201 (Joint App.), at JA6765 (Elhauge Report).

¹⁸⁸ *Id.* at JA2717 (Armstrong Investor Q&A).

¹⁸⁹ *Id.* at JA6775 (Elhauge Report) (manufacturing plants require huge investment).

¹⁹⁰ *Id.* at JA6776 (Elhauge Report) (economies of scale).

¹⁹¹ *Id.* at JA6777 (Elhauge Report) (explaining Armstrong stated its “competitive position has been enhanced by patents on products”).

¹⁹² ECF Doc. No. 242 (Roxul Opposition Brief), at p. 22.

¹⁹³ ECF Doc. No. 201 (Joint App.), at JA6783 (“60% of revenue comes from replacing damaged or old tiles, a business in which the original supplier needs to match the existing tiles.”); JA6799 (“[A]t least 25% of [suspended acoustical ceiling tile] sales are for repairing or replacing Armstrong tiles and can be satisfied only by Armstrong tiles.”).

¹⁹⁴ *Id.* at JA6783 (Elhauge Report).

¹⁹⁵ *Id.* at JA7166 (Elhauge Rebuttal Report).

¹⁹⁶ *Id.* at JA6958 (Ordover Report).

¹⁹⁷ ECF Doc. No. 209 (Armstrong SUMF) ¶ 34.

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- ¹⁹⁸ ECF Doc. No. 201 (Joint App.), at JA6764 (Elhaug Report).
- ¹⁹⁹ *Id.* at JA7339 (Ordover Rebuttal Report).
- ²⁰⁰ *Id.*
- ²⁰¹ *Id.* at JA7340 (Ordover Rebuttal Report).
- ²⁰² *Dentsply*, 399 F.3d at 187.
- ²⁰³ *Id.*
- ²⁰⁴ *Broadcom*, 501 F.3d at 307.
- ²⁰⁵ *Dentsply*, 399 F.3d at 187 (quoting *Eastman Kodak Co.*, 504 U.S. at 480).
- ²⁰⁶ *Id.* (quoting *Eastman Kodak Co.*, 504 U.S. at 482-83).
- ²⁰⁷ *Id.*
- ²⁰⁸ ECF Doc. No. 201 (Joint App.), at JA1372, JA5986.
- ²⁰⁹ *Id.* at JA6785 (Elhaug Report).
- ²¹⁰ *Id.* at JA6957 (Ordover Report).
- ²¹¹ *Id.* at JA6959-60 (Ordover Report).
- ²¹² ECF Doc. No. 209 (Armstrong SUMF) ¶ 39; ECF Doc. No. 201 (Joint App.), at JA0741.
- ²¹³ ECF Doc. No. 201 (Joint App.), at JA7172 (Elhaug Rebuttal Report).
- ²¹⁴ *Id.* at JA6841.
- ²¹⁵ *ZF Meritor*, 696 F.3d at 271-72.
- ²¹⁶ *Id.* at 287.
- ²¹⁷ *Id.* at 286-87.
- ²¹⁸ *Id.*
- ²¹⁹ ECF Doc. No. 209 (Armstrong SUMF) ¶ 31.
- ²²⁰ *Id.* at ¶ 33.

²²¹ ECF Doc. No. 201 (Joint App.), at JA1371-72.

²²² *Id.* at JA4357 (N.T. R. Loufek, Aug. 21, 2018) (“Q: Are you aware of any distributors having non-written agreements with Armstrong to not sell Rockfon? . . . [A]: I believe all of our distributors have an agreement.”).

²²³ *ZF Meritor*, 696 F.3d at 271-72.

²²⁴ ECF Doc. No. 201 (Joint App.), at JA6943 (Ordover Report).

²²⁵ *Id.* at JA6945 (Ordover Report).

²²⁶ *Id.* at JA6946 (Ordover Report).

²²⁷ *Id.* at JA6949 (Ordover Report).

²²⁸ *Id.* at JA6951 (Ordover Report) (“Armstrong would likely have trained that distributor’s staff at other locations where Armstrong products were resold by the same distributor.”).

²²⁹ *Id.* at JA6950 (Ordover Report).

²³⁰ *Id.* at JA7239 (Elhauge Rebuttal Report).

²³¹ *Id.* at JA7239-40 (Elhauge Rebuttal Report).

²³² *Id.* at JA7151 (Elhauge Rebuttal Report).

²³³ *Id.* at JA7242 (Elhauge Rebuttal Report) (finding “Rockfon made larger proportional investments in ‘Gold Circle’-like promotional programs than Armstrong did with the benefit of exclusivity”).

²³⁴ *Id.* at JA7151 (Elhauge Rebuttal Report).

²³⁵ *Id.*

²³⁶ *ZF Meritor*, 696 F.3d at 272 (citing *Race Tires Am., Inc. v. Hoosier Racing Tire Corp.*, 614 F.3d 57, 77 (3d Cir. 2010)).

²³⁷ ECF Doc. No. 201 (Joint App.), at JA6139-40.

²³⁸ *Id.* at JA6140.

²³⁹ *Id.*

²⁴⁰ *Id.* at JA4594.

²⁴¹ *Id.*

²⁴² *Id.* at JA6161.

²⁴³ ECF Doc. No. 209 (Armstrong SUMF) ¶ 39 (under distribution agreements with large distributors like Foundation, Armstrong required these distributors to obtain Armstrong’s consent before allowing an acquired distributor to carry Armstrong products).

²⁴⁴ *Insight Equity*, 2016 WL 3610155, at *6 (finding a triable issue of material fact when plaintiff offered evidence third-party distributors rejected its business out of concern for their exclusive arrangements with defendant).

²⁴⁵ ECF Doc. No. 201 (Joint App.), at JA6140 (former CEMEX employee swore he understood “if CEMEX pursued or attempted to pursue the Rockfon line, that CEMEX might lose the Armstrong line and its rights under the Distribution Agreement”).

²⁴⁶ *ZF Meritor*, 696 F.3d at 272.

²⁴⁷ ECF Doc. No. 201 (Joint App.), at JA0668, JA0746; ECF Doc. No. 239 (Joint App.), at JA8065-66 (N.T. J. Moynihan, Sept. 11, 2018).

²⁴⁸ *ZF Meritor*, 696 F.3d at 289.

²⁴⁹ *Atl. Richfield Co. v. USA Petroleum Co.*, 495 U.S. 328, 344 (1990).

²⁵⁰ *ZF Meritor*, 696 F.3d at 289.

²⁵¹ *Id.*

²⁵² ECF Doc. No. 201 (Joint App.), at JA6841 (Elhauge Report) (opining Rockfon’s market revenue share amongst foreclosed distributors did not grow at all, while its share of unforeclosed increased from 0.8% in 2014 to 3.2% in 2017).

²⁵³ *Id.* (Elhauge Report) (showing Rockfon has achieved a 1.9% volume-based market share, and would have achieved a 3.2% volume-based market share in an unforeclosed market).

²⁵⁴ *Evans v. S. S. Kresge Co.*, 544 F.2d 1184, 1191 (3d Cir. 1976).

²⁵⁵ *See* Section II.A.4.