ROBBINS GELLER RUDMAN
& DOWD LLP
BONNY E. SWEENEY (176174)
ALEXANDRA S. BERNAY (211068)
CARMEN A. MEDICI (248417)
JENNIFER N. CARINGAL (286197)
655 West Broadway, Suite 1900
San Diego, CA 92101
Telephone: 619/231-1058
619/231-7423 (fax)
bonnys@rgrdlaw.com
xanb@rgrdlaw.com
cmedici@rgrdlaw.com
jcaringal@rgrdlaw.com
– and –
PATRICK J. COUGHLIN (111070)
STEVEN M. JODLOWSKI (239074)
Post Montgomery Center
One Montgomery Street, Suite 1800
San Francisco, CA 94104
Telephone: 415/288-4545
415/288-4534 (fax)
patc@rgrdlaw.com
sjodlowski@rgrdlaw.com

Class Counsel for Plaintiffs

[Additional counsel appear on signature page.]

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

OAKLAND DIVISION

THE APPLE IPOD ITUNES ANTITRUST LITIGATION	Lead Case No. C-05-00037-YGR
	CLASS ACTION
This Document Relates To: ALL ACTIONS.	PLAINTIFFS' MEMORANDUM OF LAW IN OPPOSITION TO MOTION TO GRANT JUDGMENT AS A MATTER OF LAW IN FAVOR OF DEFENDANT APPLE INC.
	Date: TBD Time: TBD Courtroom: 1, 4th Floor Judge: Hon. Yvonne Gonzalez Rogers

TABLE OF CONTENTS

Page

TABLE OF AUTHORITIES

Page

CASES

Page

STATUTES, RULES AND REGULATIONS

SECONDARY AUTHORITIES

I. INTRODUCTION

In its "Motion to Grant Judgment as a Matter of Law in Favor of Defendant Apple Inc." (ECF 986), Apple invades the prerogative of the jury to resolve factual disputes squarely raised by Plaintiffs' Section 2 claims.[1] Through the testimony of Plaintiffs' technical and economic experts, and through the admissions of Apple's own documents, executives and software engineers, Plaintiffs have presented ample evidence from which the jury could reasonably conclude that Apple issued and activated the Keybag Verification Code ("KVC") and Database Verification Code ("DVC") to foreclose competition in the Portable Digital Player Market. As the Court recognized in denying Apple's motion for summary judgment, Apple is hardly "immune" from such a claim. *Allied Orthopedic Appliances Inc. v. Tyco Health Care Group LP*, 592 F.3d 991, 998 (9th Cir. 2010)[2] ("changes in product design are not immune from antitrust scrutiny and . . . may constitute an unlawful means of maintaining monopoly under Section 2"). Plaintiffs have furthermore presented sufficient evidence through their expert witness, Dr. Roger G. Noll, that Apple's challenged actions: (a) had antitrust impact; and (b) resulted in conservatively estimated Class damages of approximately $351 million.

For these reasons, addressed at length below, Apple's motion is not well-taken and should be denied in its entirety.

II. GOVERNING LEGAL STANDARD

A Fed. R. Civ. P. 50(a) motion for judgment as a matter of law can be granted ***only*** if there is no legally sufficient basis for a reasonable jury to find for the nonmoving party. *Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 149-50 (2000); *see, e.g.*, *Krechman v. Cnty. of Riverside*, 723 F.3d 1104, 1109 (9th Cir. 2013) (reversing grant of judgment as a matter of law premised on judicial weighing of the evidence); *City Solutions, Inc. v. Clear Channel Commc'ns*, 365 F.3d 835, 841 (9th Cir. 2004) (same); *SmithKline Beecham Corp. v. Abbott Labs.*, No. C 07-

[1] Although Apple moves as well for judgment as a matter of law on Plaintiffs' Unfair Competition Act ("UCL") claim being simultaneously tried to the Court, its arguments are purely derivative. ECF 986 at 9:6-8 & n.1.

[2] Unless otherwise noted, citations are omitted and emphasis is added, here and throughout.

5702 CW, 2014 WL 6664226 (N.D. Cal. Nov 24, 2014) (denying Rule 50(a) motion for judgment as a matter of law on Section 2 claims).

On a Rule 50(a) motion the trial court must review the record as a whole, drawing all reasonable inferences in favor of the nonmoving party. *Reeves*, 530 U.S. at 150 ("Credibility determinations, the weighing of the evidence, and the drawing of legitimate inferences from the facts are jury functions, not those of a judge.") In doing so, the trial court must disregard "all evidence favorable to the moving party that the jury is not ***required*** to believe;" the court may therefore give credence only to evidence supporting the movant that is "uncontradicted," "unimpeached," and sourced from "disinterested witnesses." *Id.* at 151; *accord*, *Hynix Semiconductor Inc. v. Rambus, Inc.*, No. C-00-20905 RMW, 2009 WL 230039, at *2 (N.D. Cal. Jan. 27, 2009) (quotation omitted) (under Rule 50 movant must establish its case by evidence that the jury "would not be at liberty to disbelieve"). "The fundamental principle is that there must be a minimum of judicial interference with the proper functioning and legitimate province of the jury." Wright, *et al.*, 9B Fed. Prac. & Proc. Civ. §2524 (3d ed., database updated Sept. 2014).

III. APPLE'S MONOPOLY POWER IS UNCONTESTED IN APPLE'S MOTION

There are three essential elements to Plaintiffs' Section 2 monopoly maintenance claim: (a) the possession of monopoly power in the relevant market; (b) the willful acquisition or maintenance of that power; and (c) causal antitrust injury. *Allied Orthopedic*, 592 F.3d at 998. Apple's motion challenges only the second and third element of Plaintiffs' Section 2 claim, and so assumes *arguendo* that Apple possessed monopoly power over both alleged relevant markets during the Class Period.[3]

[3] In any event, "what constitutes a relevant market is a factual determination for the jury." *Image Tech. Servs. v. Eastman Kodak Co.*, 125 F.3d 1195, 1203 (9th Cir. 1997); *see, e.g.*, *SmithKline Beecham*, 2014 WL 6664226, at *3 (denying motion for judgment as a matter of law in light of Dr. Noll's expert testimony on relevant market).

IV. APPLE IS NOT "IMMUNE" FROM SECTION 2 LIABILITY

A. Plaintiffs Assert an Actionable Claim Under *Allied Orthopedic*

The second element of a Section 2 claim is the willful acquisition or maintenance of monopoly power. Contrary to Apple's "immunity" contention, a monopolist cannot use its power "'to foreclose competition, to gain competitive advantage, or to destroy a competitor.'" *Eastman Kodak Co. v. Image Technical Servs., Inc.*, 504 U.S. 451, 482-83 (1992) (quoting *United States v. Griffith*, 334 U.S. 100, 107 (1948)). Whether the defendant engaged in willful anticompetitive conduct is a question of fact. *See, e.g.*, *SmithKline Beecham*, 2014 WL 6664226, at *4-*5 (denying Rule 50 motion on whether defendant's conduct was anticompetitive).

Changes in product design "are not immune from antitrust scrutiny and may constitute an unlawful means of maintaining monopoly under Section 2." *Allied Orthopedic*, 592 F.3d at 998; *see also United States v. Microsoft Corp.*, 253 F. 3d 34, 65 (D.C. Cir. 2001) ("Judicial deference to product innovation . . . does not mean that a monopolist's product design decisions are per se lawful."). Here, Judge Ware specifically denied summary judgment as to Apple's alleged improvements "that prevented third-party applications from corrupting the iPod by 'injecting' content onto its internal database." ECF 627 at 11. Judge Ware was plainly referring to KVC and DVC (the discussion of which was rife in Apple's briefs and the expert declarations and reports[4]), and in his conclusion with respect to Update 7.0 he explicitly ***reiterated*** that the disputed issue of fact to be tried was whether that portion of 7.0 allegedly "introduced to guard against the risk of corruption" was a "genuine product improvement." *Id.* at 12-13.

B. This Is Not a "Refusal to Deal" Case.

Essentially ignoring *Allied Orthopedic* and the foregoing law of the case, Apple devotes the first third of its brief to: (1) reclassifying Plaintiffs' case from a "genuine product improvement" claim to a "refusal to deal" claim; (2) arguing that monopolists like Apple are "immune from scrutiny" in a "refusal to deal" case; and (3) arguing that exceptions recognized in "refusal to deal"

[4] *See, e.g.*, ECF 815-6, Farrugia 2011 Decl., ¶¶29-32 (discussing the "database verification" and "keybag" changes); ECF 824-6, Kelly 2011 Decl., ¶¶12-31; ECF 540, Martin Feb. 2011 Decl., ¶¶28-32.

cases are not applicable here. ECF 986, at 9:9-15:2. Because the case being tried is not, however, a "refusal to deal" case, all of Apple's arguments and case law are beside the point.

First, Judge Ware in his summary judgment ruling specifically distinguished Plaintiffs' earlier "refusal to deal" claim from their current "genuine product improvement" claim; he granted summary judgment to the former but reserved for trial the latter – specifically, whether that portion of 7.0 "introduced to guard against the risk of corruption" constituted a genuine product improvement. ECF 627 at 12-13.

Second, Plaintiffs' "approach at trial" has squarely challenged the genuineness of the purported product improvement wrought by KVC and DVC – precisely that portion of 7.0 "introduced to guard against the risk of corruption." Plaintiffs have not argued nor tried to admit evidence that Apple had a "duty to deal" with Real, Navio or any other rival third-party music seller. Indeed, it would be suicide to do so given the Court's preliminary and proposed final instructions that Apple had no duty to deal with its competitors. Trial Tr. at 212:15-18 (preliminary instruction). Plaintiffs have instead consistently asserted that Apple's issuance and activation of the specific and completely severable KVC and DVC functions was not a genuine product improvement because – by disrupting the performance of the iPod any time something has as much as "touched" the iPod keybag or the database – they ensured a ***degraded*** user experience for those consumers with the temerity to add to their iPods legally purchased music from someone other than Apple, thereby increasing switching costs and harming the Class by rendering price demand for iPods less elastic. Trial Tr. at 1069-1071 (Noll testimony); Trial Tr. at 431:21-24 (Martin testimony).

Allied Orthopedic and *Microsoft* are not, as Apple would have it, "irreconcilable" with *Verizon Communications, Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398 (2004) and the other "refusal to deal" cases cited by Apple. *See, e.g.*, *LiveUniverse, Inc. v. MySpace, Inc.*, 304 Fed. Appx. 554 (9th Cir. 2008) (affirming dismissal of an inadequately plead "refusal to deal" claim lacking any allegation of a voluntary course of dealing or cooperation).[5] None of these "refusal to

[5] *Bookhouse of Stuyvesant Plaza, Inc., v. Amazon.com, Inc.*, 985 F. Supp. 2d 612, 617 (S.D.N.Y. 2013) (refusal to deal case brought by competitor); *MiniFrame Ltd. v. Microsoft Corp.*, No. 11 Civ. 7419 (RJS), 2013 U.S. Dist. LEXIS 49813 (S.D.N.Y. Mar. 28, 2013) (same), *aff'd*, 551 Fed. Appx. 1

deal" cases cite *Allied Orthopedic* or *Microsoft*. Likewise unavailing are cases where (unlike here) the plaintiff failed to controvert the genuineness of the purported product improvement. *E.g.*, *Cal. Comp. Prods., Inc. v. Int'l Business Mach. Corp.*, 613 F.2d 727, 744 (9th Cir. 1979) (affirming directed verdict where defendant had presented "uncontroverted" evidence at trial that the design change to integrate a computer model and a disk product was "a cost-saving step, consistent with industry trends").

Finally, nothing in *Novell, Inc. v. Microsoft Corp.*, No. 2:04-CV-01045-JFM, 2012 U.S. Dist. LEXIS 98710 (D. Utah Jul. 16, 2012), *aff'd on other grounds*, 731 F.3d 1064 (10th Cir. 2013), *cert. denied*, 134 S. Ct. 1947 (2014), once again a case in which a spurned rival asserted a "refusal to deal" theory, supports an award of judgment as a matter of law to Apple on the record in this case. There, the plaintiff claimed that the defendant's withdrawal of information (after inducing reliance) caused a delay in the plaintiffs' ability to produce a competitive product, allegedly increasing its cost of doing business. The district court's grant of Rule 50 judgment is that unique "refusal to deal" scenario was so fact-specific that that decision has never been cited by any other court.

V. A JURY COULD FIND CAUSAL ANTITRUST IMPACT AND DAMAGES FROM THE EVIDENCE PRESENTED

Dr. Noll testified that his assignment was to determine whether the anticompetitive conduct alleged by Plaintiffs (the issuance of KVC/DVC) caused harm and, if so, to quantify that harm in terms of damages. Trial Tr. at 1067:7-13. Based on his analysis, Dr. Noll reached an opinion that the conduct identified as anticompetitive did harm consumers by increasing the degree to which they were locked-in to using iPods, resulting in the elevation of iPod prices to supracompetitive levels between September 2006 and January 2009. Trial Tr. at 1069:17-1071:10.

Dr. Noll's regression analysis isolated the challenged conduct, established Class-wide injury caused by that conduct, and quantified the amount of damages, all completely consistent with the theory of liability advanced by the Plaintiffs. As the Court ruled in the *Daubert* proceedings, Dr. Noll's regression analysis is sufficient to take the issue of antitrust impact and damages to the jury.

(S.D.N.Y. 2013); *Medtronic Minimed Inc. v. Smiths Medical MD Inc.*, 371 F. Supp. 2d 578, 588-89 (D. Del. 2005) (same).

ECF 788 at 17 ("the admission of Dr. Noll's opinions alone supplies a triable issue of fact regarding the fact and amount of antitrust damages").

Apple nevertheless argues that Dr. Noll's regression analysis is insufficient to show causation and damages for four reasons, none meritorious.

A. Dr. Noll's Hedonic Price Regression Captures the Effect of the Challenged Conduct

Dr. Noll's regression reliably isolates the price impact from KVC/DVC. Dr. Noll testified that the proper way to conduct a regression analysis is to choose variables based upon economic theory, after an investigation of the product and the market, and to choose those variables that are most likely to affect price. Trial Tr. at 1170:3-1185:4, 1292:10-20. Dr. Noll conducted this analysis, and then used product attributes that he expected were most likely to affect price. Trial Tr. at 1178:3-5 ("We put in attributes and features, not all, but important attributes and features of iPods."); 1292:10-20. He kept adding variables to the regression until they explained most of the variation in price, and excluded those variables that were highly collinear with other variables in the regression. Trial Tr. at 1185:5-15.

Apple asserts that Dr. Noll should have included other features of 7.0 in his regression, specifically Cover Flow, NFL season pass, improved video resolution, reverse syncing, the ability to download full-length movies, and Apple's playback. However, Dr. Noll testified that there was no economic basis for concluding that these features of 7.0 – which were collinear with KVC/DVC – were likely to impact price. Trial Tr. at 1204:8-1206:4, 1333:6-1334:5, 1380:15-1383:8. Trial Tr. at 1387:18-1388:3. Dr. Noll considered all of the variables that, from the point of the view of an economist (and from the point of view of Apple's Pricing Committee) were likely to affect price. Trial Tr. at 1124:4-1130:15, 1170:3-1185:4; TX 731-33, TX 735, TX 754-55. The pricing committee documents, for example, show that Apple's pricing committee took into account the various features of the iPods and competing players – but not the accompanying software. TX 731-33, TX 735. And to the extent that 7.0 features were mirrored by iPod feature changes, those attributes were taken into account in the regression. Trial Tr. at 1178:2-1186:23, 1295:13-1296:10, 1333:6-21, 1336:13-24, 1341:20-1342:1; TX 754, TX 755.

Equally important, Dr. Noll's hedonic model explains more than 98% of the variation in pricing among iPods. TX 754, TX 755; Trial Tr. at 1194:1-19, 1203:12-19. This demonstrates that his model is highly reliable, and has high explanatory power.

B. Dr. Noll's Regression Need Not Distinguish Between KVC and DVC

Apple argues that Dr. Noll failed to separate the effects of KVC and DVC. ECF 986 at 17:12-19. But this ignores the undisputed evidence that KVC was in all the affected models, and once the DVC was activated, both were in all affected models. Trial Tr. at 382:7-24. The iPod nano (2nd, 3rd, and 4th generations), iPod Classic (6th and 7th generations), and iPod touch (1st and 2nd generations) all had both KVC and DVC (although DVC was not activated until 2007). *Id.* Because all these models had KVC, which blocked iPod interoperability with Harmony and similar DRM translation software (like Navio), Dr. Noll's damages model proves impact and damages for purchasers of all these models as well. TX 757, TX 760, TX 761; Trial Tr. at 929:11-14, 1217:6-11.

C. Additional Items in iTunes 7.0 Do Not Undermine Dr. Noll's Causation Analysis

Apple argues that Harmony would have failed due to FairPlay changes implemented in 7.0 other than KVC. This argument is premised on the testimony of Apple witnesses Farrugia, Cue and Robbin, ECF 986 at 17-18, all interested witnesses whose testimony must be discounted or ignored entirely in light of their simultaneous and contradictory testimony concerning how quickly earlier architectural changes involving the "keybag" were reverse-engineered. Trial Tr. at 517:9-16, 696:1-9, 738:13-19. Real had worked around such change in 4.6, 4.7 and changes in 6.0 had no impact on Real. *See infra* at 13-15. Because such changes are – unlike KVC – only temporary, they do not increase the lock-in effect of the KVC or otherwise prevent Dr. Noll from distinguishing in his regression analysis between impact resulting from the KVC and impact resulting from another cause. Trial Tr. at 1219:4-17, 1222:2-25, 1394:1-9, 1396:24-1397:3.

D. The Jury Could Reasonably Conclude that Apple Saw a Competitive Threat in Markets in Which It Held Monopoly Power

Apple argues that the Noll analysis is somehow predicated on evidence that the Apple Pricing Committee expressly discussed the effect of lock-in in setting the price for the iPods. It is not. The point of Dr. Noll's analysis is that the lock-in caused by the renewed incompatibility

created by 7.0 increased some iPod owners' switching costs, thereby making demand for iPods less elastic. Trial Tr. at 1161:21-1162:11, 1167:10-18. He also testified that 7.0 caused lock-out. With lock-out, customers of Apple's competitors were locked out of iPods, which also reduced competition, enabling Apple to increase prices. Trial Tr. at 1286:7-1287:20.

Further, Apple's contemporaneous documents demonstrate that Apple certainly appreciated Real as a competitive threat. Apple's own – admitted in connection with Mr. Cue's testimony – specifically identified Real as a competitor in the digital music sales market. TX 2337 at 6 & 20. In addition:

- Apple assessed Real's Music Store and its Harmony technology and found that it provided a higher bit rate (192 kbps versus 126 kbps) and offered a seamless process for downloading and playing songs. TX 130. In internal e-mails, Apple closely watched to see how many customers Real had gained. TX 153.
- Within one month of releasing Harmony, and after running a sale on music from its store, Real had cut Apple's market share in the download market from 70% to 60%. TX 153.
- Apple had noticed that Billboard had honored Real's internet jukebox and hailed its Harmony technology "[g]roundbreaking." TX 176.

All of the foregoing would allow the jury to disbelieve the dubious testimony of Mr. Schiller and Mr. Farrugia that Apple did not view Real as a competitive threat. Apple also monitored other digital music competitors:

- Apple tracked Amazon's launch of a digital download music store. TX 2505
- Apple viewed Amazon as a competitive threat. Trial Tr. at 688:21.
- Apple closely monitored the DRM-free services offered by large, multinational companies such as Amazon Yahoo, and Wal-Mart, even before the services were rolled-out. TX 461. Apple was particularly concerned about Amazon, saying "it was the one to watch." *Id.*

Apple also tracked and viewed Navio as a competitive threat:

- Apple closely monitored Navio. TX 333.
- Like Real, Navio intended to offer a service that allowed users to play songs on multiple devices. TX 267.
- Upon hearing of the announcement, Steve Jobs told Jeff Robbin, who oversaw iTunes, "we may need to change things here . . . ." TX 267.

- Mr. Robbin, in turn, instructed Augustin Farrugia to "lock down the keybag," which would prevent songs downloaded from services offered by Apple's competitors from playing on the iPod. TX 269.

Apple likewise monitored competitive threats in the portable media player and digital jukebox market. TX 731-33, TX 735, TX 2354. The evidence also showed that Steve Jobs was a member of the Pricing Committee during the entire class period. Trial Tr. 792:8-21. He participated in most of the Pricing Committee meetings, and he was well aware of (indeed, initiated) the development of KVC in direct response to the news that Navio, another competitor in addition to Real, was now entering the market. Trial Tr. at 752:12-25, 792:18-793:2; TX 267; TX 269.

VI. THE JURY COULD CONCLUDE FROM THE EVIDENCE PRESENTED THAT APPLE ENGAGED IN WILLFUL MISCONDUCT

A. The Jury Could Conclude from the Evidence Presented that KVC and DVC Were Not Genuine Product Improvements

Plaintiffs have presented substantial evidence that KVC and DVC were not genuine product improvements. Dr. Martin squarely testified that, from a technological perspective, devising a system that precluded the user from music playing legally purchased from a source other than iTunes whenever it so much as touched the iPod keybag or database was not a product improvement. Trial Tr. at 379:14-25, 390:10-20. Simply stated, the net effect was a reduction in the number of songs one could play on the iPod. *Id.* This was no surprise to Apple, which recognized that its action amounted to "a constraint for the user experience," and braced itself for consumer blowback when it activated the KVC and DVC. TX 465; TX 2 at 33; *see also id.* at 34 (also recognizing that the KVC and DVC would "downgrade the user experience").

The jury could reasonably find Apple's contention that the KVC and DVC functions were responsive to "corruption" issues to be bogus. Apple's own engineers found that DRM-protected songs worked fine on the iPod. TX 128. There is no evidence of any groundswell of customer complaints of corruption in the years preceding KVC and DVC. Trial Tr. at 386:11-388:2. And the purported "fix" to the purported "problem" was not even extended to the tens of millions iPods sold before 7.0 – and thus did nothing to address the problem that Apple claims called for the fix. Trial Tr. at 380:12-381:2. Nor are there any documents directly linking the creation of KVC and DVC to any customer complaints relating to "corruption." Trial Tr. at 386:11-388:2.

Instead, as summarized below, the evidence presented clearly shows the true genesis of KVC and DVC was the willful foreclosure of competition in the digital music sales market. *Allied Orthopedic*, 592 F.3d at 1001 ("Evidence of an innovator's initial intent may be helpful to the extent it shows that the innovator knew all along that the new design was no better than the old design, and thus introduced the design solely to eliminate competition.").[6]

In the case of the KVC, the evidence shows that on November 16, 2005, in response to a news article about Navio, Steve Jobs emailed Jeff Robbin that set the chain of events in motion. TX 267. Within ***two days***, Jeff Robbin had reached out to Augustin Farrugia asserting Apple needed to "lock down the keybag." TX 269. Robbin informed Farrugia that "if someone inserts keys that we didn't create, remove them" to which Farrugia responds that it is a "very simple mechanism." TX 269. Within days Farrugia gives a description of how the FairPlay DRM allows for injection by a third party such as Real and Navio. TX 2776. Specifically, Farrugia notes that:

> The injection is then used to add DRMed songs in the library. The injection uses the man in the middle attack that creates genuine DRM key material (*i.e.*, Account Key and Key Protection Key). The key material is then injected in the iPod's Keybag that can no longer be identified or removed.

TX 2776 at 2.

Farrugia proposes two solutions to what he calls a "flaw" in the architecture. TX 2776. In the FairPlay Next Generation document, he writes:

> **Improvement of the Current Security**
>
> The internal security validation process of the current iPod security shows that the security architecture has several flaws and one of them allows the injection in the iPod's Keybag without the control of the iPod Account Key manager. The injection is then used to add DRMed songs in the library. The injection uses the man in the middle attack that creates genuine DRM key material (i.e., Account Key and Key Protection Key). The key material is then injected in the iPod's Keybag that can no longer be identified and can no longer be removed as well.
>
> Several cryptography techniques can stop the injections but cannot eliminate the injected DRM key material of a contaminated Keybag. The eradication of injection can only be done with constraint for the user experience and it is not a description available in this part of the document.

TX 2 at 33.

[6] Intent is an element of Plaintiff's attempted monopolization claim. ECF 986 at 9.

On the next page Farrugia notes that the "upgrade" will consequently downgrade the user experience:

> Stopping the injection will imply upgrade processes either for iTunes or the iPods that consequently downgrade the user experience. A simplification of the injection control is to mandate iPod FairPlay architecture for new products that requires a new version of iTunes FairPlay version. Thus the legacy is no longer required and the injection can no longer be done.

Id. at 34.

That the KVC was directed at competitors such as Real is not in question, as Farrugia notes that Real has exploited this flaw "to DRM their music to be compatible for iPod implementation of FairPlay." *Id.* at 80.

The DVC has a similar history *i.e.*, a direct link to Apple's intention to knock out third party players. In February 2006 Apple learned that Amazon was planning on launching its own set of music services. TX 2354 at 8. Specifically, an internal Apple document notes the significant threat Amazon's move would pose to Apple:

> ***Amazon's Music Play***
>
> In February, the Wall Street Journal reported that Amazon is in the midst of launching its own set of music services.
>
> What's unique about the service is that it will offer an Amazon branded digital music player at a discount or for free with a subscription contract for a set period, probably 1 year. This is similar to how mobile phone carriers use free phones tied to service contracts to acquire customers.
>
> Rumor has it that the service is slated to feature both a la carte and subscription downloads, coupled with CD purchasing for music not currently available within their digital catalog. This service poses a significant threat to iPod+iTunes when comparing our customer base to Amazon's 55M active customers.

TX 2354 at 8.

Within weeks Apple has one of its engineers, Rod Schultz, design the "Database Verification API," which extended the deliberate user disruption to all music, DRM-protected and DRM-free. TX 327 (assignment is "[t]o prevent injection of content [into] iPod databases from clients other than iTunes into the iPod (DRM protected ***or*** non-DRM protected"). If Amazon were to come out with its own music service, the DVC would prevent a jukebox from Amazon from organizing songs on the iPod even though the songs are DRM free – Amazon's announced intention. Trial. Tr. at 433:21-

434:3; TX 2354. Because Apple dominated this market with 80% of the portable digital player market, Amazon's new service would suffer greatly if Apple rolled out the DVC. And Apple would face a formidable competitor if that competitor could sell songs DRM free songs that could play on the iPod. The DVC is in the code for 7.0 but not turned on until September 5, 2007. Trial Tr. at 382:11-383:3. It coincides with Amazon going live with its own music services but without a portable digital player and with a lighweight music manager. TX 2505. Apparently Apple and Amazon had worked out an agreement and Amazon put Apple front and center in Amazon's new service. Apple notes internally:

> Amazon MP3 is web-based and offers a lightweight download manager application that routes purchases ***directly*** to the iTunes Library or Windows Media Player. Amazon clearly highlights the fact that their downloads are DRM-free and work with iPod, iTunes, and virtually all other digital music hardware and software available today.

TX 2505 at 1. As Amazon came on line with its DRM-free music store, Apple turned on the DVC that was in the 7.0 code to block all other third party players (like AOL's Winamp and jRiver Media Centers). Trial Tr. at 449:5-9, 688:9-11. At trial, Apple contends that these players were "corrupting" the system. However, many of these third-party players had organized DRM free music on Apple's iPod for years. Trial Tr. at 898:11-22. It was not corruption Apple was responding to, but third-party competition.

Apple's "corruption" explanation is thus utter pretext. KVC and DVC each served its intended purpose. KVC knocked out competitors selling DRM-protected songs to be played on the iPod. DVC knocked out third party players managing DRM-free songs on the iPod. *United States v. Dentsply Intern., Inc.*, 399 F.3d 181, 196 (3rd Cir. 2005) (trial court found that the defendant's asserted justifications for its exclusionary policies were, among other things, inconsistent with its announced reason for the exclusionary policies and its conduct enforcing them).

B. The Jury Could Conclude from the Evidence Presented that Apple Engaged in Anticompetitive Conduct as to the KVC and DVC Notwithstanding the Other Features of Update 7.0

Apple essentially argues that, because 7.0 had many other bells and whistles besides KVC and DVC, the updates are necessarily genuine product improvements notwithstanding the KVC and DVC. As Apple would have it, so long as any one or more bells or whistles could be deemed a

product improvement, then the entire upgrade must be deemed a product improvement. This argument is sorely misguided for two reasons.

First, to ague product improvement Apple improperly conflates the KVC and DVC with all the other features of the entire update. Apple is free to argue to the jury that these other features should have been considered by Dr. Noll (he explains when they should not and when they should), but they have nothing to do with whether KVC and DVC are genuine product improvements in terms of preventing "corruption" – the specific issue Judge Ware reserved for trial. Again, the briefing on summary judgment was rife with specific references – by both Plaintiffs and Apple and their respective experts – to the operation and effect of KVC and DVC.

The second problem with Apple's argument is that none of the bells and whistles were available ***without*** also accepting KVC and DVC. Apple's theory is like arguing a redesigned Snickers bar that is larger in size and has added chocolate content is necessarily a product improvement even though it also comes with a new but toxic preservative. Under Apple's theory, the anticompetitive means by which Internet Explorer was integrated into Microsoft's redesigned Windows operating system would not have been actionable. *Microsoft*, 253. F.3d at 65-66.

C. The Jury Could Conclude from the Evidence Presented the that the Other Changes to FairPlay Would Not Have Prevented Harmony from Working

Plaintiffs have likewise not challenged redesigns of FairPlay other than KVC and DVC, such as the universal keybag, individually encrypted keys and encryption of the whole keybag. Unlike KVC and DVC, these changes to the FairPlay architecture are directed at DRM rather than "corruption," and have never been at issue in this case. Yet Apple argues that there is no evidence that Real would have been able to circumvent the other security measures added to FairPlay through 7.0.

This is simply not so. There is direct evidence in the record that supports Plaintiffs' position that these other measures would have been easily circumvented by Real and others such as Navio. In July 2004 Real reverse-engineered Apple's FairPlay DRM and was able to put Real's songs into the iPod to play on the iPod. TX 2139. To do this Real had to deal with the format and security in iTunes 4.6. TX 2139. Apple likened Real to hackers. TX 124. Real responded that Harmony

creates a way to load content from Real's music store in a way that is compatible with the iPod and that Real's Harmony technology does not remove or disable any digital rights management system. TX 136.

Apple even tested Real's Harmony technology finding it worked. TX 128. Specifically, Apple determined at least the following:

- Downloaded song is 192 kbps AAC Song as copied to iPod is also 192 kbps
- Harmony will transfer to iPod writing valid v3 keybag and iPod US
- Harmony will also transfer authorized iTMS songs to the iPod
- Harmony will not let you burn authorized iTMS songs

TX 128.

Finally, Apple's Dave Heller noted:

> Switching to the new embedded keybag will slow them down but if they get the public key in iTunes they can continue to do this. Not clear how hard this will be to reverse engineer.

Id. Heller was right.

Real's Harmony technology worked to put Real's DRM songs onto the iPod for several months until Apple issued iTunes 4.7. TX 128; Trial Tr. at 355:2-4. Real then reverse-engineered iTunes 4.7 within six months – even though it was the most extensive revision of iTunes up to that date. Trial Tr. at 372:16-20, 940:24-941:1.

Real's Harmony worked through another upgrade 6.0. Trial Tr. at 372:16-23. Next came 7.0 with the KVC and DVC. Trial Tr. at 382:11-17. The KVC knocked Real's Harmony out for good. Trial Tr. at 374:15-21. It should be noted, KVC is a wrap around the entire keybag. Trial Tr. at 373:17-374:10. With its protection Real never got past this boundary. Trial Tr. at 410:8-10. There is simply no evidence, however, that the other keybag changes Apple points to today, which were not specifically directed at Real, would have had ***any*** impact on Real's ability to regain compatibility. Trial Tr. at 517:9-16, 696:1-9. In fact, as noted above, Apple's own executives constantly emphasized at trial how quickly these features had been circumvented when added in earlier versions of iTunes. Trial Tr. at 738:13-19.

D. The Jury Could Conclude that KVC and DVC Did Not Genuinely Improve Stability and Safety

Relying almost exclusively on the testimony of its own executives that the jury is not required to accept, Apple argues that KVC and DVC were product improvements because they allowed Apple to detect whenever the keybag or the database was "touched," and that touching "might" have been by a hacker. This is certainly the worldview of Mr. Farrugia, who viewed every attempt to place any content other than Apple content on the iPod as a "flaw" that must be eradicated. Trial Tr. at 492:1-4 ("What I am trying is to make sure that people from the outside, they are not allowed to put things on my world . . . ."). But there is another view. Apple did not just record the "touch" and attempt to identify it as friend or foe; it instead led iPod the user on a process that, if one followed Apple's prompts, caused the user to lose all music purchased from a source other than Apple (unless that user has undertaken the cumbersome process of burning and ripping that music before trying to pay it on the iPod). Trial Tr. at 380:24-382:6. As explained above, both the true effect of and the intent behind KVC and DVC are inconsistent with Apple's post-hoc characterization of them as "security" and "safety" enhancements.

E. The Jury Could Credit Dr. Martin's Expert Testimony

Contrary to Apple's assertions, Dr. Martin's testimony wholly supports Plaintiffs' claims. Far from being "rife with admissions," Dr. Martin's trial testimony detailed that KVC was not a product improvement, Trial Tr. at 379:14-16, and that the DVC, which was installed but not enabled in 7.0, was also not a product improvement. Trial Tr. at 390:10-20. Mr. Martin explained that Apple's changes to its DRM systems through KVC and DVC "degrade[ed] the user experience." Trial Tr. at 431:21-24. He further explained that the effect of stopping third party software through KVC and DVC created the "worst possible outcome" for users of the iPod. Trial Tr. at 434:22-25. Any "bugs" in various systems were also made worse by Apple's claimed security fixes. Trial Tr. at 435:20-436:5.

Apple's citations are completely untethered to the record. For example, contrary to Apple's citation that Dr. Martin admitted it was "elementary security" to upgrade before keybag hacks, not after, Dr. Martin instead simply testified that it was elementary security to try to predict weaknesses

in a system. Trial Tr.at 416:23-24. Similarly, Apple's claim that Dr. Martin agreed iTunes 4.7 RSA security was vulnerable to attack twists the general statement that: "No security system is a hundred percent invulnerable to attack" into standing for something completely different than what the actual trial testimony reveals. Apple's other supposed admissions are just as misleading. Trial Tr. at 417:4-7. Dr. Martin did not testify that Apple was entitled to encrypt songs or firmware but instead that it was not improper. Dr. Martin did not address issues related to the keybag in the cited testimony. Each of Apple's supposed concessions are belied by the record where, in fact, Dr. Martin never testified that any of Apple's DRM changes in 7.0 were to make the system more secure. A jury can credit his testimony that KVC and DVC were not product improvements and that the claims of security enhancement are pretext.

F. The Jury Could Conclude from the Evidence Presented that Apple Engaged in Willful Misconduct Notwithstanding Its "Walled Garden" Approach

Citing its own witnesses' testimony ***thirteen*** times, Apple argues that the entire "integrated iPod+iTunes System" – formerly known as the "Walled Garden" – was itself "a product improvement." ECF 986 at 26-27. The supportive testimony is not only not disinterested, it is irrelevant, for using an integrated product platform does not somehow immunize Apple from liability for the issuance and activation of KVC and DVC. The contention is not that Apple or any other manufacturer may not adopt an integrated product approach, it is that Apple as a monopolist cannot take predatory actions deliberately designed only to increase consumer switching costs, constraining consumer choice in order to maintain its monopoly power.

G. The Jury Could Conclude From the Evidence Presented the that Apple Lacked a Legitimate Business Justification for Adding KVC and DVC to Updates 7.0

A defendant who has both attained monopoly power and exercised exclusionary conduct can avoid Section 2 liability by proof of a legitimate business justification. *Image Tech. Servs.*, 125 F.3d at 1212. A plaintiff may rebut an asserted business justification by showing either that the justification does not legitimately promote competition or that the justification is pretextual. *Id.* at 1212 (citing *Kodak*, 504 U.S. at 483–84). Whether a purported valid business reason motivated a monopolist's conduct is a question of fact for the jury. *High Tech. Careers v. San Jose Mercury*

News, 996 F.2d 987, 990 (9th Cir. 1993) (citing *inter alia*, *Eastman Kodak Co.*, 504 U.S. at 483-84); *SmithKline Beecham*, 2014 WL 6664226, at *5; *see, e.g.*, *Image Tech. Servs.*, 125 F.3d at 1213 (affirming finding that defendant's purported business justification of "quality control" was pretextual).[7]

Apple in its motion proffers three purported business justifications, all of which are premised ***wholly*** on the testimony of Apple senior executives Schiller and Robbin, ECF 986 at 29-30 – testimony which is neither disinterested nor undisputed (and thus not properly considered by the Court under Rule 50). In any event, Apple argues that by adding KVC and DVC it was supposedly "strengthen[ing] its DRM technology" in response to criticism from competitors, to protect its reputation, and to satisfy its contractual obligations to the record labels. ECF 986 at 29-30.

But the jury is certainly not required to accept any of these *post-hoc* explanations, because: (a) they are not memorialized by any contemporaneous records relating to the genesis of KVC and DVC; (b) they are contrary to the evidentiary genesis of KVC and DVC summarized above DVC (which focused instead on precluding "injection" rather than protecting DRM); and (c) they are contrary to the testimony of label executive Amanda Marks (who conceded that the labels supported the interoperability afforded by Harmony). Trial Tr. at 774:16-24, 777:10-19, 778:20-779:13. Nor do any of these business reasons necessarily justify so atavistic a "fix" that, through a series of deliberately cryptic prompts, ultimately precludes consumer desire to play on the iPod music legally sourced from Apple's competitors.

Plaintiffs' evidence rebutting genuineness is sufficient to raise a jury question as to the legitimacy of Apple's purported business justification. *SmithKline Beecham*, 2014 WL 6664226, at *6 (Rule 50 motion denied as to whether defendant's purported legitimate business justification was pretextual); *Novell*, 2012 U.S. Dist. LEXIS 98710, at *14-*15, *31 (Rule 50 judgment unwarranted

[7] Guidance in assessing a legitimate business reasons defense can be found in the wealth of case law addressing pretext in discrimination cases. *Novell*, 2012 U.S. Dist. LEXIS 98710. In that arena, the plaintiff may present evidence of "weaknesses, implausibilities, inconsistencies, incoherencies, or contradictions" in the defendant's proffered reasons for its action that a reasonable factfinder could rationally find them "unworthy of credence," and hence infer "that the employer did not act for [the asserted] non-discriminatory reasons." *Fuentes v. Perskie*, 32 F.3d 759, 765 (3rd Cir. 1994); *see also Reeves*, 530 U.S. at 153-54 (holding that a plaintiff "introduced enough evidence for a jury to reject" the defendant's explanation as pretextual).

given single e-mail from which jury could reasonably find asserted business justification to be pretextual).

VII. TO CLASS MEMBERS WHO PURCHASED IPODS DURING THE CLASS PERIOD WITHOUT KVC AND DVC

Because Dr. Noll was unable to quantify the damages for those impacted Class members who, during the Class Period, purchased models issued by Apple that did not have KVC and DVC installed, Plaintiffs do not oppose Apple's motion as to Plaintiffs' Section 2 claim asserted on behalf of those Class members who purchased ***only*** unaffected models.

VIII. CONCLUSION

For the foregoing reasons, except as stated in §VII, Apple's motion should be denied.

DATED: December 13, 2014

Respectfully submitted,

ROBBINS GELLER RUDMAN
& DOWD LLP
BONNY E. SWEENEY
ALEXANDRA S. BERNAY
CARMEN A. MEDICI
JENNIFER N. CARINGAL

s/ Bonny E. Sweeney
BONNY E. SWEENEY

655 West Broadway, Suite 1900
San Diego, CA 92101
Telephone: 619/231-1058
619/231-7423 (fax)

ROBBINS GELLER RUDMAN
& DOWD LLP
PATRICK J. COUGHLIN
STEVEN M. JODLOWSKI
Post Montgomery Center
One Montgomery Street, Suite 1800
San Francisco, CA 94104
Telephone: 415/288-4545
415/288-4534 (fax)

Class Counsel for Plaintiffs

BONNETT, FAIRBOURN, FRIEDMAN
& BALINT, P.C.
ANDREW S. FRIEDMAN
FRANCIS J. BALINT, JR.
ELAINE A. RYAN
2325 E. Camelback Road, Suite 300
Phoenix, AZ 85016
Telephone: 602/274-1100
602/274-1199 (fax)

THE KATRIEL LAW FIRM
ROY A. KATRIEL
1101 30th Street, N.W., Suite 500
Washington, DC 20007
Telephone: 202/625-4342
202/330-5593 (fax)

BRAUN LAW GROUP, P.C.
MICHAEL D. BRAUN
10680 West Pico Blvd., Suite 280
Los Angeles, CA 90064
Telephone: 310/836-6000
310/836-6010 (fax)

GLANCY BINKOW & GOLDBERG LLP
BRIAN P. MURRAY
122 East 42nd Street, Suite 2920
New York, NY 10168
Telephone: 212/382-2221
212/382-3944 (fax)

GLANCY BINKOW & GOLDBERG LLP
MICHAEL GOLDBERG
1925 Century Park East, Suite 2100
Los Angeles, CA 90067
Telephone: 310/201-9150
310/201-9160 (fax)

Additional Counsel for Plaintiffs

CERTIFICATE OF SERVICE

I hereby certify that on December 13, 2014, I authorized the electronic filing of the foregoing with the Clerk of the Court using the CM/ECF system which will send notification of such filing to the e-mail addresses denoted on the attached Electronic Mail Notice List, and I hereby certify that I caused to be mailed the foregoing document or paper via the United States Postal Service to the non-CM/ECF participants indicated on the attached Manual Notice List.

I certify under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed on December 14, 2014.

s/ Bonny E. Sweeney

BONNY E. SWEENEY

ROBBINS GELLER RUDMAN
& DOWD LLP
655 West Broadway, Suite 1900
San Diego, CA 92101-8498
Telephone: 619/231-1058
619/231-7423 (fax)

E-mail: bonnys@rgrdlaw.com

Mailing Information for a Case 4:05-cv-00037-YGR The Apple iPod iTunes Anti-Trust Litigation

Electronic Mail Notice List

The following are those who are currently on the list to receive e-mail notices for this case.

- **Amir Q Amiri**
  aamiri@jonesday.com,cdelacroix@jonesday.com
- **Francis Joseph Balint , Jr**
  fbalint@bffb.com
- **Alexandra Senya Bernay**
  xanb@rgrdlaw.com,LMix@rgrdlaw.com,TJohnson@rgrdlaw.com
- **Michael D Braun**
  service@braunlawgroup.com
- **Michael D. Braun**
  service@braunlawgroup.com,clc@braunlawgroup.com
- **Thomas R. Burke**
  thomasburke@dwt.com,natashamajorko@dwt.com,sfodocket@dwt.com
- **Jennifer N. Caringal**
  JCaringal@rgrdlaw.com,Chuckm@rgrdlaw.com
- **Todd David Carpenter**
  Todd@Carpenterlawyers.com
- **Patrick J. Coughlin**
  PatC@rgrdlaw.com,SusanM@rgrdlaw.com,e_file_sd@rgrdlaw.com,SJodlowski@rgrdlaw.com,e_file_sf@rgrdlaw.com
- **John F. Cove , Jr**
  jcove@bsfllp.com,jchavez@bsfllp.com,kmurphy@bsfllp.com,dnasca@bsfllp.com,sphan@bsfllp.com
- **Meredith Richardson Dearborn**
  mdearborn@bsfllp.com,cseki@bsfllp.com
- **Karen Leah Dunn**
  kdunn@bsfllp.com
- **Andrew S. Friedman**
  khonecker@bffb.com,rcreech@bffb.com,afriedman@bffb.com
- **Martha Lea Goodman**
  mgoodman@bsfllp.com
- **Alreen Haeggquist**
  alreenh@zhlaw.com,judyj@zhlaw.com,winkyc@zhlaw.com
- **William A. Isaacson**
  wisaacson@bsfllp.com,jmilici@bsfllp.com
- **Suzanne Elizabeth Jaffe**
  SJAFFE@BSFLLP.COM,jchavez@bsfllp.com
- **Steven M. Jodlowski**
  sjodlowski@rgrdlaw.com
- **Roy Arie Katriel**
  rak@katriellaw.com,rk618@aol.com
- **Thomas J. Kennedy**
  tkennedy@murrayfrank.com

- **David Craig Kiernan**
  dkiernan@jonesday.com,lwong@jonesday.com
- **Carmen Anthony Medici**
  cmedici@rgrdlaw.com,slandry@rgrdlaw.com
- **Caroline Nason Mitchell**
  cnmitchell@jonesday.com,mlandsborough@jonesday.com
- **Robert Allan Mittelstaedt**
  ramittelstaedt@jonesday.com,mlandsborough@jonesday.com,pwalter@jonesday.com
- **Brian P. Murray**
  bmurray@glancylaw.com
- **Maxwell Vaughn Pritt**
  mpritt@bsfllp.com,jchavez@bsfllp.com,irivera@bsfllp.com
- **Christopher G. Renner**
  crenner@bsfllp.com
- **George A. Riley**
  griley@omm.com,lperez@omm.com,cchiu@omm.com
- **Kieran Paul Ringgenberg**
  kringgenberg@bsfllp.com,gaulkh@bsfllp.com,cduong@bsfllp.com,dnasca@bsfllp.com,sphan@bsfllp.com,irivera@BSFLLP.com
- **Elaine A. Ryan**
  eryan@bffb.com,rconnell@bffb.com
- **Jacqueline Sailer**
  jsailer@murrayfrank.com
- **Michael Tedder Scott**
  mike.scott@dlapiper.com
- **Jonathan H Sherman**
  jsherman@bsfllp.com
- **Craig Ellsworth Stewart**
  cestewart@jonesday.com,mlandsborough@jonesday.com
- **Bonny E. Sweeney**
  bonnys@rgrdlaw.com,slandry@rgrdlaw.com,E_file_sd@rgrdlaw.com,ckopko@rgrdlaw.com
- **Helen I. Zeldes**
  helenz@zhlaw.com,winkyc@zhlaw.com,aarono@zhlaw.com

Manual Notice List

The following is the list of attorneys who are **not** on the list to receive e-mail notices for this case (who therefore require manual noticing). You may wish to use your mouse to select and copy this list into your word processing program in order to create notices or labels for these recipients.

- (No manual recipients)