

From: Nick Penwarden [REDACTED]
Sent: Fri, 11 May 2018 14:22:37 +0000 (UTC)
To: John Jack [REDACTED]
Cc: Tim Sweeney [REDACTED] Josh Adams [REDACTED]
Dana Cowley [REDACTED] Kim Libreri [REDACTED]
Daniel Vogel [REDACTED] Marcus Wassmer [REDACTED]
[REDACTED] Jack Porter [REDACTED]

Subject: Re: quotes for wwdc

DEFENDANT	United States District Court Northern District of California
	Case No. 4:20-cv-05640-YGR
	Case Title <i>Epic Games, Inc. v. Apple, Inc.</i>
	Exhibit No. DX-3098
	Date Entered _____
	Susan Y. Soong, Clerk
	By: _____, Deputy Clerk

Thanks all, these are great. I'll pass these on to Apple!

On Wed, May 9, 2018 at 11:05 AM John Jack [REDACTED] wrote:

Here are the proofed and slightly cleaned up versions of both quotes. btw Metal was released in June 2014.

We've been making use of Metal on iOS to great effect since its release in 2014. A fast, agile, feature-rich API like Metal is exactly what we need to bring a game designed for modern consoles and desktops to the battery-powered iPhone and iPad. As a developer, it blows away OpenGL in every way. We were able to get Fortnite ship-ready on iOS in a handful of months as we weren't hindered by graphics!

Metal gave us the injection of performance required for shipping the full Fortnite: Battle Royale experience on iOS quickly, with no compromises. Porting a game built for high-end gaming consoles to iOS was a greatly superior experience with Metal than OpenGL.

John Jack (JJ)
Lead Producer, Special Projects

On Wed, May 9, 2018 at 10:39 AM, Tim Sweeney [REDACTED] wrote:

I like yours the best. Let's give both to Apple to let them mix and match and attribute as they like.

Tim

On May 9, 2018, at 10:37 AM, Josh Adams [REDACTED] wrote:

A quote from scratch, in case it helps:

We've been making use of Metal on iOS since its release in 2014 (?) to great effect. A fast, agile, feature-rich API like Metal is exactly what we need bring a game designed for modern consoles and desktops to the battery-powered iPhone and iPad. As a developer, it blows away OpenGL in every way. We were able to get Fortnite ship-ready on iOS in a handful of months as we aren't hindered by graphics!

(I had wanted to put in a dig at Android, but felt implied dig was better, hehe)

On Wed, May 9, 2018 at 7:28 AM Tim Sweeney [REDACTED] wrote:

More:

Metal gave us the injection of performance required for shipping the the full Fortnite: Battle Royale experience on iOS quickly, with no compromises. Porting a game built for high-end gaming consoles to iOS was a greatly superior experience with Metal than OpenGL.

Tim

On May 9, 2018, at 10:15 AM, Dana Cowley [REDACTED] wrote:

Punchier?

Metal gave us the injection of performance required for shipping the the full Fortnite: Battle Royale experience on iOS quickly, with no compromises. This would not have been possible with OpenGL.

On Wed, May 9, 2018 at 9:52 AM, Kim Libreri [REDACTED] wrote:

Whilst factually correct, It's a bit dry and not as hip as one would have expected from the coolest game developer on the planet.
Pump it up. Dana and JJ are excellent wordsmiths.

Sent from my iPad Pro

On May 9, 2018, at 6:47 AM, Nick Penwarden [REDACTED] wrote:

Jeremy Sandmel @ Apple is looking for some quotes from Epic on how Metal aided us in shipping FNBR on iOS:

We are specifically interested in anything honest and true highlighting:

- ease of use / approachability of Metal, especially compared to competitive or other APIs/platforms*
- performance gains of Metal over OpenGL (or even compared to Vulkan / DX if relevant)*
- stability / quality of implementation broadly across the platform (ideally iOS and macOS, but whatever is true for you), especially compared to what we assume to be fragmentation of quality and support across other platforms*
- ease / speed of adoption*
- ability to leverage platform specific features*
- anything else about the overall development environment (performance and debugging tools, shading language, etc).*

Performance gain over OpenGL is the #1 differentiator that allowed us to get FNBR running on iOS faster and at higher quality than Android. Here is a starting point:

The performance and features of Metal allowed us to bring the full Fortnite: Battle Royale experience to iOS quickly and at higher quality than is possible with OpenGL.

I'm looking for feedback, wordsmithing, etc. :)