

[REDACTED]

From: Matt Perry [REDACTED]
Sent: 31 January 2022 14:50
To: Mobile Ecosystems
Subject: Remedy area 3 evidence

I'm a web developer, I'd like to provide an example relating to Remedy area 3. This email represents my own views and interests and no confidential information.

Ostensibly, Apple allow third-party browsers on their OS. As noted in section 5, this is a bit of a veneer as they **don't** allow third-party browser engines.

This is a problem, as Webkit, the permitted browser engine, contains a series of bugs related to their implementation of hardware accelerated animations.

Hardware accelerated animations means running animations on the GPU rather than the CPU, which is better for battery life and performance.

Webkit contains a number of clauses not present in other browsers where it bails out of hardware accelerated animations, forcing them to run on the CPU.

This is an esoteric list of conditions not widely understood by developers. If a hardware accelerated animation does successfully run there are a number of synchronisation, timing and rendering bugs in Webkit which can break the desired animation effect.

The above is why my project, <https://motion.dev>, force disables hardware accelerations in Safari by triggering one of the clauses mentioned earlier.

The issue here is that even though Chrome is very popular on iOS, because Apple forbids third-party engines this is actually built on Webkit. This gives Webkit an artificially high market share. This means web developers are forced to deal with these problems. At the same time there is no competition. Which means Apple has no incentive to fix the situation.

If third party engines were allowed on iOS, Webkit would have a much smaller market share and Apple would be forced to compete and maintain it in order to keep users.

Thanks for reading
Matt