John Garney

9780 SW Red Rock Way

Beaverton, OR 97007

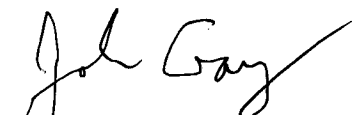March 7, 2021

IEEE History Committee:

I was a member of the Intel technical team that developed the USB 1.0 and USB 2.0 Specifications. I was the technical lead for the definition of several parts of the specifications, including: data flow model, hubs, the USB descriptors and standard requests. I was the chairman of the USB 2.0 Hub Working Group and led the definition of the non-electrical portions of USB 2.0. I personally wrote many sections of those USB specifications. While at Intel, the team I led and was part of, created the first USB software drivers and worked with the very first vendors of USB devices to get their devices working and compliant. I have delivered technical talks at international USB developers conferences since the very beginning and have taught international classes on USB technology. One of the first books about USB that I wrote (along with other authors) is cited in the milestone proposal. I am also the inventor of several USB related patents.

Since retiring from Intel, I have provided engineering and expert witness consulting services about USB to a variety of clients. I was a extensive reviewer of the USB 3.0 specification and the Hub Working Group Vice-Chairman of what became USB 3.1.

I lived through many of the earliest technical experiences and debates described in the IEEE milestone proposal, for example, changing from an originally conceived 5Mb/s bus, through a 10mb/s bus to the eventual 1.5mb/s & 12mb/s USB 1.0 bus definition. I remember when Bala Cadambi and I were on a train in Japan and happened to meet Jim Pappas (of DEC at the time) and thought he might be a good fit to work on USB.

I have reviewed the milestone citation and proposal, and feel it accurately describes the history of the development of USB and the reality of USB in the world today. I am continually amazed that since those earliest days back in 1994, USB is not only still present in the world, but is in active use by billions of devices and many millions (if not billions) of people throughout the world. From my involvement in the computer and electronics industries, it is unusual for a technology to remain at the forefront for 25+ years.

The importance of USB for normal non-technical people "on the street" as well as computer experts merits being recognized for an IEEE milestone. I fully support this effort and applaud IEEE for taking this step.

John Garney