III. Potential Legal Issues

In the process of obtaining a patent, the most common substantive rejections are novelty and obviousness rejections. For a quantum software application, a patent-eligibility rejection is also likely. The subsections below discuss patent-eligibility and obviousness challenges especially for quantum software applications.

A. Patent Eligibility

The case law on patent eligibility of software has been unclear and inconsistent. This subsection does not attempt to, nor can it, predict the patent eligibility of quantum software. But at least there are more arguments available for patent eligibility of quantum software than those of classical software.

Courts tend to find a software claim ineligible if it is “not tied to any particular novel machine or apparatus, only a general-purpose computer.” From a policy perspective, such claims