Technology and Taxonomy for Lawyers

Dr Alexander Ressos, TEP
Attorney-at-Law (Switzerland and Germany),
Solicitor (England & Wales and Hong Kong)
Of Counsel, KGP Legal LLC
alexander.ressos@kgplegal.com.sg
www.ressos.com.sg

A lawyer who advises on digital assets does not need to write code. She does need to know, with precision, which technical fact produces which legal consequence. The Swiss rules on segregation in a custodian's bankruptcy turn on who holds a private key and whether a wallet can be attributed to a client. Singapore's licensing perimeter turns on whether a service "deals in" or "facilitates the exchange of" a digital payment token, which in turn depends on whether the provider ever has possession or control of the token. A tax authority asking whether a staking reward is income needs to know what a validator does and when the reward becomes disposable. Every one of those questions is a technical question first.

This Part therefore does two things. It explains the technology of distributed ledgers at the level of detail a practitioner needs and then stops. It does not explain elliptic-curve mathematics or Byzantine fault tolerance beyond the point at which a legal consequence follows. Then it sets out the taxonomies through which Swiss and Singapore law sort tokens into categories, compares them with the European Union's MiCA categories that the reader's counterparties will use, and works through the hard cases that every classification exercise eventually meets.

© 2026 Dr Alexander Ressos. General information only, not legal, tax or investment advice. No client relationship is created. All Singapore law advice is provided by a duly licensed and regulated firm of Singapore advocates and solicitors only on the basis of an express written letter of engagement. More information at SingaporeIQ.com and ressos.com.sg.

Stablecoins, tokenised real-world assets, decentralised finance and decentralised autonomous organisations each receive a chapter of their own because each raises a distinct cluster of technical facts with legal weight.

The regulatory and private-law consequences themselves are dealt with in Parts D, E, J and K. Where this Part states a legal rule, it does so to show why the technical fact matters and then cross-refers. A reader who already knows the technology may skip to Chapter III. A reader who already knows the taxonomies but has never followed a transaction through a block explorer should read Chapter I with particular care, because that is where most advisory mistakes originate.

The glossary in Chapter VIII collects every technical term used in the book. Terms defined there appear in the running text without further explanation once they have been introduced.

Disclaimer

This article is provided for general information only. It is based on publicly available sources as at its date of publication. These sources have not been independently verified against licences, regulatory registers or the records of the entities concerned. It is not legal, tax, financial or investment advice. Nor is it a recommendation to invest in, transact with or use the services of any entity mentioned. Law and regulation change frequently, so the content may be incomplete or outdated. To the fullest extent permitted by law, Dr Alexander Ressos and the publisher of SingaporeIQ exclude all liability for loss or damage arising from the use of or reliance on this article. Readers should obtain advice on their specific circumstances before acting or refraining from action.

Names and trademarks of the entities discussed belong to their owners and are used for identification only. Their mention implies no endorsement, affiliation or allegation of wrongdoing. All Singapore law advice is provided by a duly licensed and regulated firm of Singapore advocates and solicitors only on the basis of an express written letter of engagement. Corrections and updates: contact@ressos.com.

© 2026 Dr Alexander Ressos. This article may be quoted with attribution to SingaporeIQ (SingaporeIQ.com). Reproduction in full and any commercial use require prior written consent. The Legal Terms at https://singaporeiq.com/legal-terms apply.

Author contact: Dr Alexander Ressos, TEP · contact@ressos.com