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Blockchain Technology: Drafting Effective Patent Claims

Salvatore P. Tamburo
Ameya “Arun” V. Paradkar

Disclaimer

The materials on this presentation are provided for informational purposes only. They are not intended as and do not constitute legal advice and should not be acted on as such. You should seek the advice of an attorney with respect to any matter contained in the presentation.

Blockchain Overview

- Blockchain Resolves Traditional Recordkeeping Issues
  - Old Technology: Centralized Authority for Records Creates a Single Point of Failure
    - Susceptible to hackers
    - Susceptible to hardware failure
    - Increased transaction costs due to middlemen and hardware/financial limitations
  - Blockchain: Distributed Ledger
    - Decentralization prevents hackers from compromising the entire system at one node
    - Decentralized hardware prevents collapse due to a single point of failure
    - Peer-to-peer nature of the transactions eliminates middlemen and reduces costs

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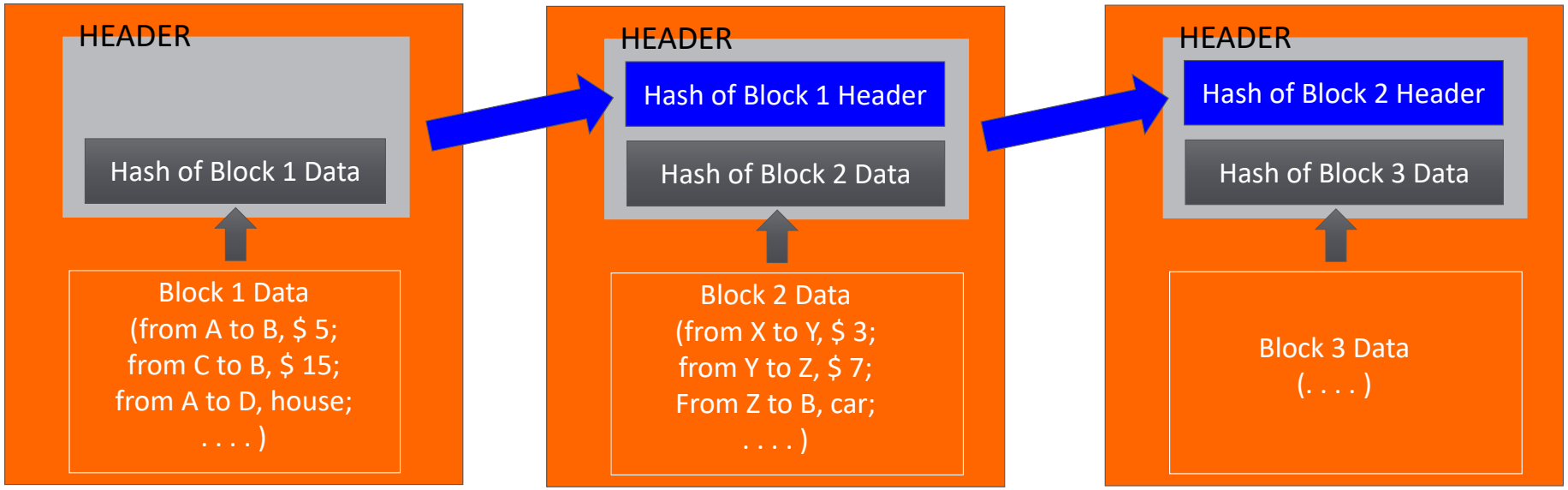
Blockchain: Basics of How it Works

- Transactions in Blocks
- Blocks Linked by Hash



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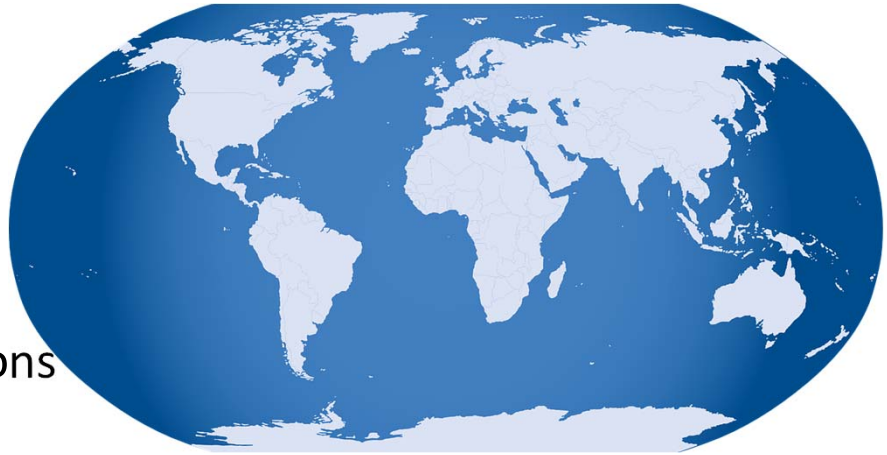
Blockchain Overview

- Decentralized, distributed database technology
- Multiple actors
  - Managing Entity (Ethereum, Bitcoin, etc.)
  - Nodes (Users & Miners)
- Applications
  - Supply chain management
  - Licensing chains / deeds
  - Smart contracts / financial transactions
  - Cryptocurrency



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Divided Infringement

1. A method to record transactions on a distributed network comprising,

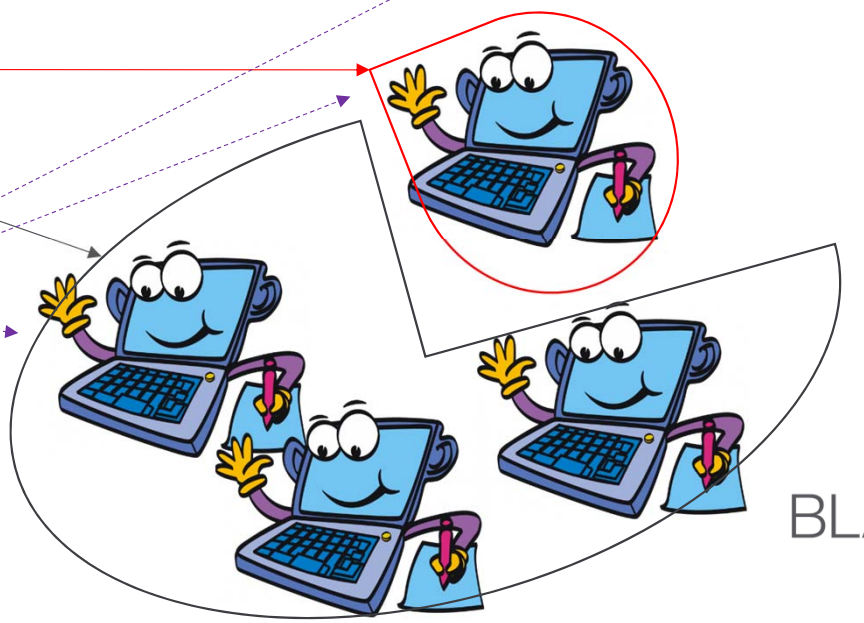
submitting one or more proposed transaction to the distributed network (user);

providing a cryptographic algorithm to hash the submitted transactions (managing entity);

cryptographically hashing the submitted transactions based on the provided algorithm (miner);

verifying the hashed transactions (other miners); and

recording the verified transaction in one or more databases (miners/managing entity).



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Akamai Tech. Inc. v. Limelight Networks, Inc., 797 F.3d 1020 (Fed. Cir. 2015) (en banc)

(1) an entity **directs or controls** others' performance: an alleged infringer
- conditions participation in an activity or receipt of a benefit upon performance of a step or steps of a patented method; and
- establishes the manner or timing of that performance.

(2) actors form a **joint enterprise**, requires proof of:
- an agreement, express or implied, among the members of the group;
- a common purpose to be carried out by the group;
- a community of pecuniary interest in that purpose, among the members; and
- an equal right to a voice in the direction of the enterprise, which gives an equal right of control.

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Extraterritorial Activity

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"We therefore hold that a process cannot be used 'within' the United States as required by section 271(a) **unless each of the steps is performed within this country**." *NTP, Inc. v. Research In Motion, Ltd.*, 418 F.3d 1282, 1318 (Fed. Cir. 2005)

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Extraterritorial Activity

1. A system to record transactions on a distributed network comprising,

a distributed network to which a proposed transaction is submitted;

a first device for cryptographically hashing the submitted transactions based on a cryptographic algorithm; and

a second device for verifying the hashed transaction; and

a database for recording the verified transaction.

"The use of a claimed system under section 271(a) is the place at which the system as a whole is put into service, *i.e.*, the place where **control of the system is exercised** and **beneficial use of the system obtained**." *NTP, Inc. v. Research In Motion, Ltd.*, 418 F.3d 1282, 1317 (Fed. Cir. 2005)

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Drafting a Blockchain Claim – Best Practices

- System Claims
  - ➢ Every element should be directed to a single actor's activities
    - ❑ Managing Entity (*i.e.* all elements directed to a single server)
    - ❑ Node (*i.e.* all elements directed to the activities of a user/miner)
  - ➢ Control of the system and the benefits derived from it should be in the United States

- Method Claims
  - ➢ Each step should be controlled or directed by a single actor
    - ❑ Conditional Participation or Receipt of a Benefit upon Step Performance
    - ❑ Control over Manner and Timing of a Step
  - ➢ Each step must be performed in the United States

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Blockchain Technology and Patents

Salvatore Tamburo
stamburo@blankrome.com

Ameya (Arun) Paradkar
aparadkar@blankrome.com

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