



Industrial Consultancy & Sponsored Research (IC&SR)

INTENT-BASED METHOD AND SYSTEM FOR PROVIDING TRANSACTIONAL SECURITY

IITM Technology Available for Licensing

PROBLEM STATEMENT

- Generally, in conventional method, the financial institutions send a notification to the user via SMS or email, etc. on completion of a transaction related to the account of the user. However, in case any **fraudulent transactions** happen, there may be **financial loss suffered by the user**.
- Further, there are many other solutions discussed, but failed to address the issues related to said one issue like **fraudulent transaction happening as long as the upper limit is not crossed**.
- Hence, there is a need to mitigate above challenges, and present invention provides the solution in efficient manner.

INTELLECTUAL PROPERTY

IITM IDF Ref. 1131

Patent Application No: 809/CHE/2014

TECHNOLOGY CATEGORY/ MARKET

Technology: Intent-based method and system for providing transactional security

Industry & Applications: Banking Sector, Ecommerce, Fintech, ICT & etc.;

Market: The global payment security market is projected to grow at a **CAGR of 16%** during **2023-2027**.

TECHNOLOGY

- The present invention describes a method for **controlling a transaction associated** with an **object**.
- The **transaction** comprises at least one of a **credit card** transaction, a **debit card** transaction, **direct** transaction, **indirect** transaction, & **object access** transaction.
- The object comprises at least one of a document, **credit card**, **debit card**, **custodian entity**, & **consumer electronic device**.
- Further, the function is initiated after receiving an **intent** or **electronic message**.

- Further the present invention explains about a **system** for **controlling at least one transaction** associated with at least one object. The system comprises a **user controlled configurable Authorization (UCCA) engine**, and a **custodian entity**.
- The operation of the present invention is depicted in the smart chart:

1st Step

- Receive at least one intent related to at least one transaction to performed by said user at said UCCA engine;

2nd Step

- Receive at least one request to perform said at least one transaction from the user by said UCCA engine from said custodian entity;

3rd Step

- Determine a match between said at least one request and at least one intent related to said at least one transaction to be performed; and

4th Step

- In response to determining said match, allow said at least one transaction by said custodian entity.

Herein, the intent means an electronic message through which said operation starts.

TRL (TECHNOLOGY READINESS LEVEL)

TRL-2/3, Proof of Concept ready, & tested

RESEARCH LAB

Inventor: Mr. B. Viswanathan

Department of Management Studies

CONTACT US

Dr. Dara Ajay, Head

Technology Transfer Office,
IPM Cell- IC&SR, IIT Madras

IITM TTO Website:

<https://ipm.icsr.in/ipm/>

Email: smipm-icsr@icsrpis.iitm.ac.in

sm-marketing@imail.iitm.ac.in

Phone: +91-44-2257 9756/ 9719

Image

FIG 1A

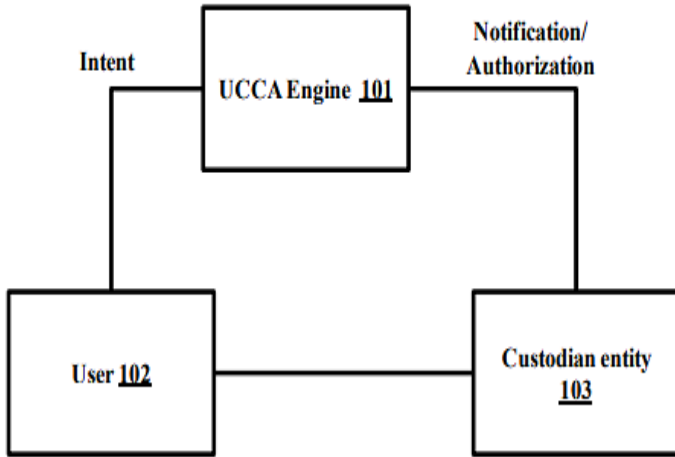


FIG 1A: Illustrates a system for enabling a user to control access to a secured entity;

FIG 1B

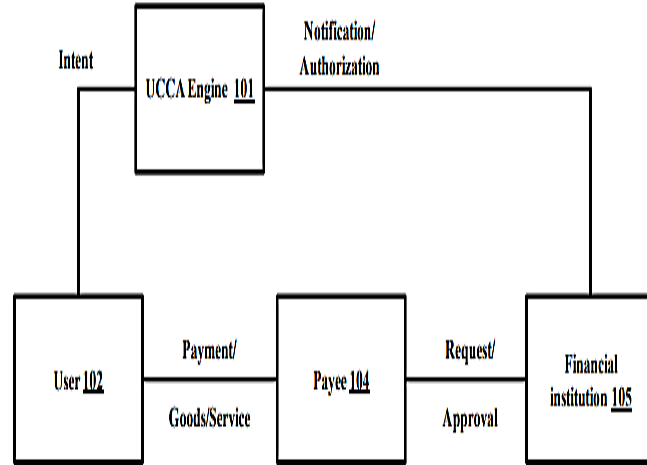


FIG 1B : Illustrates an example wherein a user authorizes individual transactions related to a financial institution;

KEY FEATURES / VALUE PROPOSITION

❖ ***Technical Perspective:***

- **Desired Transaction:** The claimed invention discloses that the intent indicates that the user wants to perform the desired transaction. Thus, as long as the proposed transactions are in conformity with the rules/instructions, they will be carried out.
- **Facilitate Dynamic operation based on user intent:** There is no specific rules/instructions provided or followed in the present invention, rather it completely depends on the intent of the user and it changes dynamically based on instruction given by the user through e-message,

❖ ***Industrial Perspective:***

- Applicable in **Financial Institution, an online storage location , ATMS** and etc.

FIG 1C

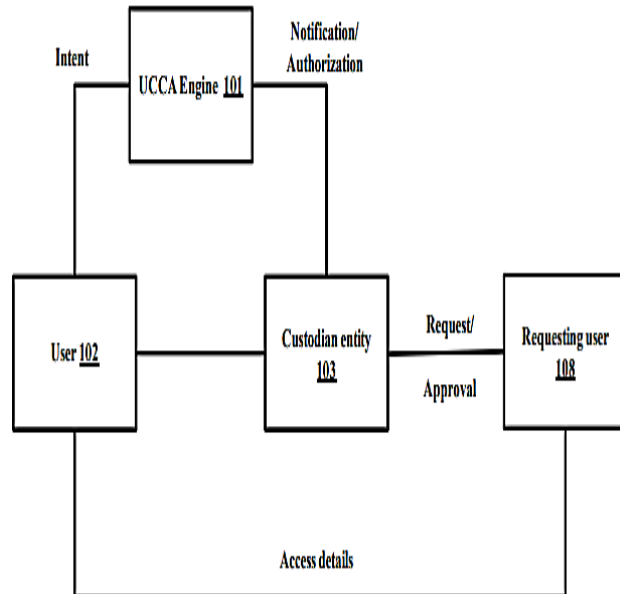


FIG 1C: Illustrates an example wherein an owner of a document authorizes individual access attempts of the document by another user,

CONTACT US

Dr. Dara Ajay, Head
Technology Transfer Office,
IPM Cell- IC&SR, IIT Madras

IITM TTO Website:
<https://ipm.icsr.in/ipm/>

Email: smipm-icsr@icsrpis.iitm.ac.in
sm-marketing@imail.iitm.ac.in
Phone: +91-44-2257 9756/ 9719