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**Datasheet for the decision
of 6 December 2023**

Case Number: T 1587/20 - 3.5.01

Application Number: 15819505.7

Publication Number: 3167419

IPC: G06Q20/36, G06Q20/38, G06Q30/02

Language of the proceedings: EN

Title of invention:
DISTRIBUTED LEDGER PROTOCOL TO INCENTIVIZE TRANSACTIONAL AND
NON-TRANSACTIONAL COMMERCE

Applicant:
Loyal Holdings Incorporated

Headword:
Ledger protocol to incentivise commerce/LOYAL HOLDINGS

Relevant legal provisions:
EPC Art. 56

Keyword:
Inventive step - rewarding a user's desired behaviour and
recording the rewards on a public ledger (no - not technical)

Decisions cited:
T 0336/07, T 0641/00



Beschwerdekammern
Boards of Appeal
Chambres de recours

Boards of Appeal of the
European Patent Office
Richard-Reitzner-Allee 8
85540 Haar
GERMANY
Tel. +49 (0)89 2399-0
Fax +49 (0)89 2399-4465

Case Number: T 1587/20 - 3.5.01

D E C I S I O N
of Technical Board of Appeal 3.5.01
of 6 December 2023

Appellant: Loyyal Holdings Incorporated
(Applicant) Office 3207, HDS Tower, Cluster F
Jumeirah Lakes Tower
Dubai (AE)

Representative: FRKelly
27 Clyde Road
Dublin D04 F838 (IE)

Decision under appeal: **Decision of the Examining Division of the
European Patent Office posted on 24 February
2020 refusing European patent application No.
15819505.7 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman W. Chandler
Members: W. Zubrzycki
C. Schmidt

Summary of Facts and Submissions

- I. This is an appeal against the decision of the examining division to refuse European patent application No. 15819505.7 for lack of inventive step (Article 56 EPC) over D1 (US 2014/164251 A1).
- II. In the statement setting out the grounds of appeal, the appellant requested that the decision of the examining division be set aside and a patent be granted on the basis of the refused request, namely claims 1 to 15 filed during the oral proceedings before the examining division on 28 January 2020. There was also an auxiliary request for oral proceedings.
- III. In a communication accompanying the summons to oral proceedings, the Board tended to agree with the decision that claim 1 of the sole request did not involve an inventive step. In the Board's view several expressions were also unclear.
- IV. The appellant made no substantive reply to the Board's communication, but in a letter dated 4 December 2023, the appellant withdrew the request for oral proceedings.
- V. The oral proceedings took place on 6 December 2023 in the appellant's absence. After considering the facts of the case, the Chairman announced the decision.
- VI. Claim 1 of the sole request reads:
" *An incentive protocol system (1), the system comprising;
an incentive protocol network (12) comprising a distributed ledger (24) and at least one incentive*

protocol network participant compute device (28a, 28b), a first server configured to provide access to incentive data issued or defined by an open assets protocol employed by the incentive protocol network (12), and a logic control unit;

a digital wallet associated (20) with a product or service, wherein the wallet (20) includes one or more private keys having an associated amount of tokens; and

a transfer resource (76) accessible by a first party that is not in possession of the product or service to change the amount of tokens,

an incentive protocol platform (10) and an incentive module (13),

wherein the incentive module (13) is configured to:

receive incentive event data (14) from one or more of point of sale devices, credit/debit card machines and the at least one incentive protocol network participant compute device (28a, 28b), wherein the incentive event data is associated with an event (16) of an incentive protocol network participant (74) associated with the at least one incentive protocol network participant compute device (28a, 28b);

generate an incentive unit transaction record based on the incentive event data (14) and at least one incentive protocol system rule;

broadcast the incentive unit transaction record to the distributed ledger (24) for inclusion therein;

calculate an incentive unit of value based on the generated incentive unit transaction record; and

distribute the incentive unit of value to the at least one incentive protocol network participant compute device (28a, 28b),

wherein the digital wallet (20) is remotely addressable by the first party via the transfer resource (76) to increase or decrease the incentive

unit associated with the product or service to incentivize a desired behavior."

Reasons for the Decision

1. The Board agrees with the decision under appeal that claim 1 of the sole request does not involve an inventive step.
2. The invention
 - 2.1 The invention concerns a system for incentivising a user both to behave in a desired way and to purchase a particular product (see paragraphs [15], [22] and [29] of the published application).
 - 2.2 The idea of the invention is to give users participating in an incentive program ([22], last sentence), rewards ("incentive units of value" in the claim), such as gift cards or coupons ([24]), to incentivise behaviour desired by the provider of the program. While not claimed, the behaviours might range from promoting some service on social media to attending a gym ([22] and [29]). The system achieves this by collecting data on the users' behaviour ("incentive event data") from either their computers or a POS or an ATM terminal ([35]). Then it records the reward on a distributed ledger and provides it to the users' computers ([36]).
 - 2.3 In a separate embodiment, see paragraph [55], lines 4 and 5, the invention associates a product with a digital wallet containing tokens and private keys, see [57]. The application explains that the tokens represent exchangeable units of value, such as cryptocurrency units, gift cards and coupons, see [56].

The digital wallet can receive tokens from a user which is not in possession of the product ("*a first party that is not in possession of the product*") to incentivise a desired behaviour.

While not claimed, but disclosed in the application, the digital wallet is an incentive to purchase the product and becomes the property of its buyer. The subsequent token transfers are conducted by the product manufacturer to incentivise the product's resale for example, see [57] and [62], last sentence.

3. Article 56 EPC, claim 1

3.1 While not discussed in the contested decision, the Board notes that claim 1 contains several undefined expressions, namely an open assets protocol, incentive event data and an incentive protocol system rule.

Furthermore, the claim defines, on the one hand, that the digital wallet contains tokens and, on the other hand, that it is accessed to increase or decrease "*the incentive unit*". Thus, it is not clear what the digital wallet actually contains.

Notwithstanding those clarity objections, the Board is in the position to decide inventive step based on the understanding of the invention given at point 2, above.

3.2 The Board agrees with the decision (see point 13.9) that D1 is a suitable starting point.

3.3 D1 discloses that a user transfers digital tokens, corresponding to the units of value in claim 1, to another user's computer ([60] and [64]), wherein token transfers are documented in a ledger table, shown in

Figure 19 ([102]). In the "note" column, the ledger table stores messages accompanying token send operations. Paragraph [32] discloses that the ledger table can be distributed.

3.4 Furthermore, paragraphs [131] and [136] of D1 disclose a physical token containing a bitcoin address and private key which together correspond to the digital wallet in claim 1; the physical token itself corresponds to the wallet's associated product. Furthermore, paragraph [131] discloses that any party can transfer bitcoins to the bitcoin address. Thus, contrary to the appellant's and the examining division's view (cf. decision, point 13.4, difference vi; grounds of appeal page 7, third bullet point), D1 discloses the feature of enabling a party not being in possession of the product to increase the number of tokens. This renders the appellant's arguments concerning the non-obviousness of this feature moot (see grounds of appeal, page 7).

3.5 Hence, claim 1 differs from D1 (lettering by the Board):

- A) In that the tokens are added to the wallet in order to incentivise a desired behaviour.
- B) By a server configured to provide access to incentive data issued or defined by the open assets protocol employed.
- C) By receiving incentive event data from one or more of point of sale devices, credit/debit card machines and at least one incentive protocol network participant compute device.
- D) In that the distributed ledger stores records based on the incentive event data and at least one incentive protocol system rule.

E) In that the amount of tokens transferred between users is based on the generated incentive unit transaction record.

- 3.6 Feature A merely defines a user's business motivation and makes no technical contribution. Feature B is, at the broad level claimed, an obvious implementation of the business requirement that some unspecified incentive data should be made available to users.
- 3.7 Features D and E correspond to distinguishing features (i) to (iv) according to point 13.4 of the decision. At point 13.8 of the decision, the examining division held that those features defined a business scheme and the Board agrees. The scheme requires that participating users' behaviour is to be monitored, documented in the public ledger and used as basis for token transfers.
- 3.8 The appellant argued that the distinguishing features provided the technical effect of enabling a party, who no longer had physical access to the product, to obtain historical and logistical information about it. For example, a product's manufacturer could see that tokens were transferred in connection with the sale of his product. This effect was "*over and above the effects and advantages inherent in the excluded subject-matter*", as discussed in decision T 336/07, and therefore gave rise to a technical problem and counted towards an inventive step (grounds of appeal, page 4, page 7, penultimate paragraph and page 8).

However, as was essentially stated at point 13.12.3 of the decision, the advanced effect is not derivable from the claim which does not mention storing any product-related historical data, let alone storing data concerning the product associated with the digital

wallet (see point 2.3 above). Neither does the claim define that information on transferred tokens is stored anywhere in the system.

3.9 The claimed implementation of the above business scheme (feature C) is limited to receiving the information on business activities from the users' computers and to adding this information to the distributed ledger. The Board agrees with the examining division (decision, point 13.11) that these features would have been obvious, once, using the COMVIK approach (see decision T 641/00 - *Two identities/COMVIK*), the business scheme has been provided to the skilled person to implement for non-technical reasons.

3.10 Hence, claim 1 lacks an inventive step (Article 56 EPC).

4. The appellant alleged that the contested decision was flawed for the following reasons:

- Points 13.10 and 13.11 were contradictory. While point 13.10 stated that the distinguishing features did not make any technical contribution, point 13.11 stated that those features were obvious which implied that they did make some technical contribution (grounds of appeal, pages 2 and 3).

However, the Board cannot see any contradiction here. The points cited in the decision made clear that the distinguishing features contained non-technical aspects which made no technical contribution *per se*. By contrast, the implementation of these aspects on the system of D1 made a technical contribution and entered the examination for inventive step. This is a correct application of the COMVIK approach.

- The decision incorrectly referred to decision T 366/07 instead of T 336/07. This error was only corrected in response to the appellant's correction request (grounds of appeal, page 4).

However, in the Board's view it is clear from both the decision's text and the minutes at page 4, penultimate paragraph that the examining division analysed decision T 336/07 and the error at issue was merely typographical.

5. As the appellant's sole request is not allowable, it follows that the appeal has to be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



T. Buschek

W. Chandler

Decision electronically authenticated