Technical Disclosure Commons

Defensive Publications Series

January 2024

IS LIMIT

Shubham Dubey Visa

Ishani Basu Visa

Surbhi Sharma Visa

Follow this and additional works at: https://www.tdcommons.org/dpubs_series

Recommended Citation
Dubey, Shubham Visa; Basu, Ishani Visa; and Sharma, Surbhi Visa, "IS LIMIT", Technical Disclosure Commons, (January 15, 2024)
https://www.tdcommons.org/dpubs_series/6604

This work is licensed under a Creative Commons Attribution 4.0 License.
This Article is brought to you for free and open access by Technical Disclosure Commons. It has been accepted for inclusion in Defensive Publications Series by an authorized administrator of Technical Disclosure Commons.

IS LIMIT

VISA

INVENTORS: (i) Shubham Dubey;

(ii) Ishani Basu; and

(iii) Surbhi Sharma

TECHNICAL FIELD

[0001] The present invention, in general, relates to Installment Solutions (IS limit), and more particularly, but not exclusively to a system and a method for splitting the existing card limit of a cardholder into a regular and IS limit and defining plans for IS limit.

BACKGROUND

[0002] A challenge with existing transactional process holds a lack of awareness among cardholders to use installment options. Further, the existing installment solutions neither provide any adoptable installment procedures nor teach how to make the installments flexible for customers, and is one of the problems of Instalment Solutions. Thus, there is a need of increasing awareness among cardholders in using installment options and how to make installments flexible for customers.

SUMMARY

[0003] The present disclosure provides a system and method for splitting the existing card limit of a cardholder into a regular and a Installment Solutions (IS limit) and defining plans for IS limit. The method further comprises issuing a virtual sub-PAN for IS limit and push provision to eligible merchant apps; and at the time of checkout, selecting sub-PAN as payment mode by the cardholder, where all transactions under the sub-PAN are aggregated during the billing cycle and split into EMIs based on pre-defined plan.

[0004] Thus, the present disclosure provides a solution for removing the hassle of merchant integration with IS and helping to create more awareness about IS. Further, the present disclosure encourages the user to use the IS limit even for smaller valued transactions. Thus, the method and system of the present disclosure provides a solution that sits on top of IS post transaction services.

[0005] The foregoing summary is illustrative only and is not intended to be in any way limiting. In addition to the illustrative aspects, embodiments, and features described above, further aspects, embodiments, and features will become apparent by reference to the drawings and the following detailed description.

DESCRIPTION OF DRAWINGS

[0006] The accompanying drawings, which are incorporated in and constitute a part of this disclosure, illustrate exemplary embodiments and together with the description, serve to explain the disclosed principles. In the figures, the left-most digit(s) of a reference number identifies the figure in which the reference number first appears. The same numbers are used throughout the figures to reference like features and components. Some embodiments of device and/or methods in accordance with embodiments of the present subject matter are now described below, by way of example only, and with reference to the accompanying figures.

[0007] **Figure 1** illustrates an exemplary environment of a system 100 for implementing embodiments consistent with the present disclosure.

[0008] **Figure 2A** illustrates a flow diagram of User enablement and configuration of IS limit on issuer app in accordance with some embodiments of the present invention.

[0009] **Figure 2B** illustrates a flow diagram of User experiences on merchant app in accordance with some embodiments of the present invention.

[0010] **Figure 3A** illustrates Demo or Mock App Screens 300 of Issuer side user experience in accordance with some embodiments of the present invention.

[0011] **Figure 3B** illustrates Demo or Mock App Screens 350 of merchant side checkout experience in accordance with some embodiments of the present invention.

[0012] It should be appreciated by those skilled in the art that any block diagrams herein represent conceptual views of illustrative systems embodying the principles of the present subject matter. Similarly, it will be appreciated that any flowcharts, flow diagrams, state transition diagrams, pseudo code, and the like represent various processes which may be substantially represented in computer readable medium and executed by a computer or processor, whether or not such computer or processor is explicitly shown.

DETAILED DESCRIPTION

[0013] In the present document, the word “exemplary” is used herein to mean “serving as an example, instance, or illustration.” Any embodiment or implementation of the present subject matter described herein as “exemplary” is not necessarily to be

construed as preferred or advantageous over other embodiments.

[0014] While the disclosure is susceptible to various modifications and alternative forms, specific embodiment thereof has been shown by way of example in the drawings and will be described in detail below. It should be understood, however, that it is not intended to limit the disclosure to the particular forms disclosed, but on the contrary, the disclosure is to cover all modifications, equivalents, and alternatives falling within the scope of the disclosure.

[0015] The terms “comprises”, “comprising”, or any other variations thereof, are intended to cover a non-exclusive inclusion, such that a setup, device, or method that comprises a list of components or steps does not include only those components or steps but may include other components or steps not expressly listed or inherent to such setup or device or method. In other words, one or more elements in a system or apparatus proceeded by “comprises… a” does not, without more constraints, preclude the existence of other elements or additional elements in the system or method.

[0016] In the following detailed description of the embodiments of the disclosure, reference is made to the accompanying drawings that form a part hereof, and in which are shown by way of illustration specific embodiments in which the disclosure may be practiced. These embodiments are described in sufficient detail to enable those skilled in the art to practice the disclosure, and it is to be understood that other embodiments may be utilized and that changes may be made without departing from the scope of the present disclosure. The following description is, therefore, not to be taken in a limiting sense.

[0017] The present disclosure is aimed to provide a solution for increasing the customer awareness for Installment Solutions, call as IS limit. Particularly, the present disclosure provides a technique for splitting the existing card limit of a cardholder into regular and IS limit and defining plans for IS limit. The technique also discloses issuing a virtual sub-PAN for IS limit and push provision to eligible merchant apps. At the time of checkout, cardholder may select sub-PAN as payment mode. Further, all transactions under the sub-PAN are aggregated during the billing cycle and split into EMIs based on pre-defined plan. Thus, the present disclosure helps to create more awareness about IS and encourages the user to use the IS limit even for smaller value transactions.

[0018] **Figure 1** illustrates an exemplary environment of a system 100 for implementing embodiments consistent with the present disclosure. The system 100 comprises a User 110 or cardholder that interacts with merchant app 130 using Installment Solutions (IS limit) 120. In an embodiment of the present disclosure, the Installment Solutions, IS limit 120 of Figure 1 is carried out between the user 110 and the merchant 120, to split the existing card limit of the cardholder into regular and IS limit and defining plans for IS limit 120, for encouraging the user 110 to use the IS limit even for smaller valued transactions. This way, the present disclosure increases the awareness to the customers for IS and the system 100 makes it more flexible for the customers to adapt and use during smaller valued transactions.

[0019] In an embodiment of the present disclosure, the system provides a solution to split the existing credit limit into two limits or buckets, i.e. one for regular credit limit another for IS limit 120, where the IS limit 120 may be a sub limit and be defined with a specific credit limit; and a default installment pay-off plan. The IS limit 120 may also be issued a virtual sub PAN, which when generated may be push provisioned on eligible merchants 130, so as to use it seamlessly on them during checkout. The benefit of using the virtual IS PAN during checkout may be that whatever amount transacted using IS limit 120, may be aggregated during the billing cycle, that shall be split into EMIs at the end of the cycle, based on whatever default plan has been selected. The difference being, when the customers choose which transaction goes into what bucket of his/her credit limit and the ability to go for installments on smaller transaction amounts as well, but not limiting to.

[0020] In an embodiment of the present disclosure, the system provides a solution diagram with two flowcharts (Figure 2A and 2B), where the first flowchart provides user experience on issuer app for opting in and configuring IS limit; and the second flowchart depicts the user experience on merchant checkout page.

[0021] **Figure 2A** illustrates a flow diagram of User enablement and configuration of IS limit on issuer app in accordance with some embodiments of the present invention. In an embodiment of the present disclosure, the method 200 enables user experience on an issuer app for opting in and configuring IS limit. During the issuer app experience, user gets notified (step 202) by issuer about his/her IS credit limit split eligibility, opts (step 204) in for it, and gets to configure (step 206) the IS limit amount part of regular

credit limit along with the default EMI payoff plan. On confirmation, a virtual IS sub PAN gets generated (step 208) upon config confirmation from issuer, which he can push to eligible merchant apps on his device. Further, the system 200 allows the user to get (step 210) option to push provision the virtual IS PAN on eligible merchant apps on the device, chooses (step 212) to push provision. Thus, the Virtual PAN gets pushed 214 to the selected merchants on the device. Thus, the present disclosure provides a solution to increase an awareness to customer for IS.

[0022] **Figure 2B** illustrates a flow diagram of User experiences on merchant app in accordance with some embodiments of the present invention. In an embodiment of the present disclosure, the method 220 comprises that during the merchant checkout experience, the user gets (step 222) to select the product when he wants to buy, goes (step 224) for checkout page and selects payment mode and sees (step 226) the IS credit card or PAN provisioned in the COF section along with his regular credit card. The user gets notified with some additional offers upon paying though IS card, upon selecting (i) the IS Virtual PAN as payment mode (step 228) and paying the transacted amount gets accumulated (step 230) in the IS limit to be split into installments at the end of the billing cycle in the pre-selected default plan, i.e., and at the end of the month gets billed as EMI in default plan selected; or (ii) upon selecting (step 234) regular credit card COF as payment mode, thus the transaction amount gets added (step 236) as an expense to regular credit limit (where the IS can be applied manually here). On either method, the user shall complete (step 232) his/her purchase. Thus, the present disclosure improves the customer awareness for IS limit, and makes the system more flexible for the customers to adapt and use during smaller valued transactions, but not limiting to.

[0023] **Figure 3A** illustrates Demo or Mock App Screens 300 of Issuer side user experience in accordance with some embodiments of the present invention. In an embodiment of the present disclosure, the mock screen 300 represents the issuer app user experience, via:

- User gets notified from issuer about eligibility for IS split (display 310);
- User opts in and configures the IS credit limit and regular credit limit out of the total credit limit;
- User configures the EMI pay off plan based on interest (display 320);
- On confirmation user gets a screen showing the generated IS virtual PAN along with

option to push provision that PAN on eligible merchants on the device (display 330); and

- On dashboard, user is able to see two PANs, and two credit limits (display 340).

- **Figure 3B** illustrates Demo or Mock App Screens 350 of merchant side checkout experience in accordance with some embodiments of the present invention. In an embodiment of the present disclosure, the mock screen for the merchant app checkout experience for the user provides:
- User has selected the product to buy and goes for checkout (display 360);
- On checkout screen, he/she visualizes IS Virtual PAN as a Confirmation of Funds (COF) in addition to his/her added cards, he/she also sees the extra offers of using the IS Virtual PAN as payment mode (display 370);
- Once payment is done, the requested amount is pushed to IS limit, to be converted to EMI on month end, for example, the amount $284.66 is pushed to IS limit.
- Upon selecting the IS Virtual PAN for payment, this amount gets added the expenses made on IS credit, which he/she now sees on the issuer app and also gets a message showing the total amount spent through IS Credit that will be split into EMI at the end of the cycle in the default 3 month pre-selected plan (display 380).

[0024] In an embodiment of the present disclosure, in case the user had not opted for any mode of payment and went for regular credit card based payment he/she would still get the option of doing an EMI through regular IS flow, but that would have constraints of minimum amount and manual selection of EMI plan on merchant checkout page. The method and system of the present disclosure provides solution that sits on top of IS post transaction services, where this approach would remove the hassle of merchant integration with IS, which is a cause of their merchant churn. In addition, the present disclosure creates more awareness about IS as it encourages the customers to use the IS limit or EMI based payment even for smaller valued transactions without having to go for a selection of plan on every transaction. Buy now, pay later (BNPL) is a short-term installment loan that lets the customer pay for purchases over time with no interest. Unlike BNPLs offering similar solutions, the IS limit customer gets to choose what transaction goes into, what bucket of the credit limit instead of a default split on every purchase. Further, the customer KYC remains restricted to the issuer and not on random BNPLs.

[0025] In another embodiment, the present disclosure has an inventive feature that provides the split of existing credit limit and accumulation of smaller transaction amounts to a bucket to be split into a plan of customers choice automatically by use of an alternate PAN for payment.

[0026] Furthermore, one or more computer-readable storage media may be utilized in implementing embodiments consistent with the present disclosure. A computer-readable storage medium refers to any type of physical memory on which information or data readable by a processor may be stored. Thus, a computer-readable storage medium may store instructions for execution by one or more processors, including instructions for causing the processor(s) to perform steps or stages consistent with the embodiments described herein. The term "computer-readable medium" should be understood to include tangible items and exclude carrier waves and transient signals, i.e., be non-transitory. Examples include Random Access Memory (RAM), Read-Only Memory (ROM), volatile memory, non-volatile memory, hard drives, Compact Disc (CD) ROMs, DVDs, flash drives, disks, and any other known physical storage media.

[0027] The language used in the specification has been principally selected for readability and instructional purposes, and it may not have been selected to delineate or circumscribe the inventive subject matter. Accordingly, the disclosure of the embodiments of the disclosure is intended to be illustrative, but not limiting, of the scope of the disclosure.

[0028] With respect to the use of substantially any plural and/or singular terms herein, those having skill in the art can translate from the plural to the singular and/or from the singular to the plural as is appropriate to the context and/or application. The various singular/plural permutations may be expressly set forth herein for sake of clarity.

[0029] The present invention provides several advantages to the merchant, including but not limited to better differentiation against competitors; driving higher purchasing on existing member accounts; and increasing sales by providing flexible pay-over-time solutions to the customer.

IS LIMIT

ABSTRACT

[0030] The present disclosure relates to Installment Solutions (IS limit). Particularly, the present disclosure provides a system and method for splitting the existing card limit of a cardholder into a regular and Installment Solutions (IS limit) and defining plans for IS limit. The method further comprises issuing a virtual sub-PAN for IS limit and push provision to eligible merchant apps; and at the time of checkout, selecting sub-PAN as payment mode by the cardholder, where all transactions under the sub-PAN are aggregated during the billing cycle and split into EMIs based on pre-defined plan.

Figures 2A and 2B

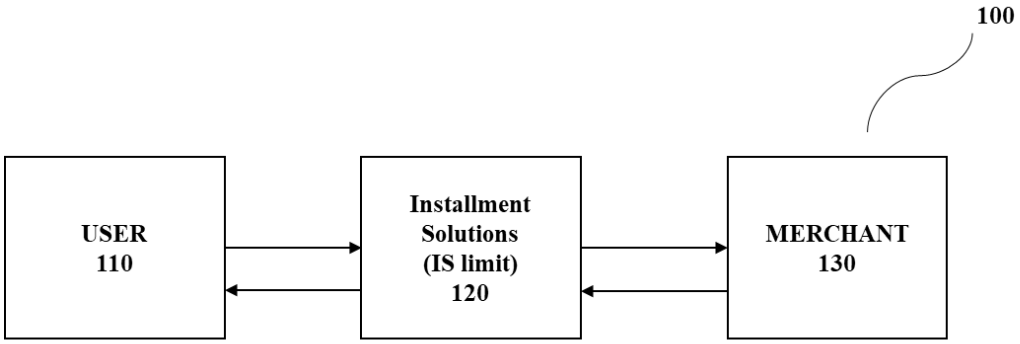
100
USER
110
Installment
Solutions
(IS limit)
120
MERCHANT
130

Figure 1

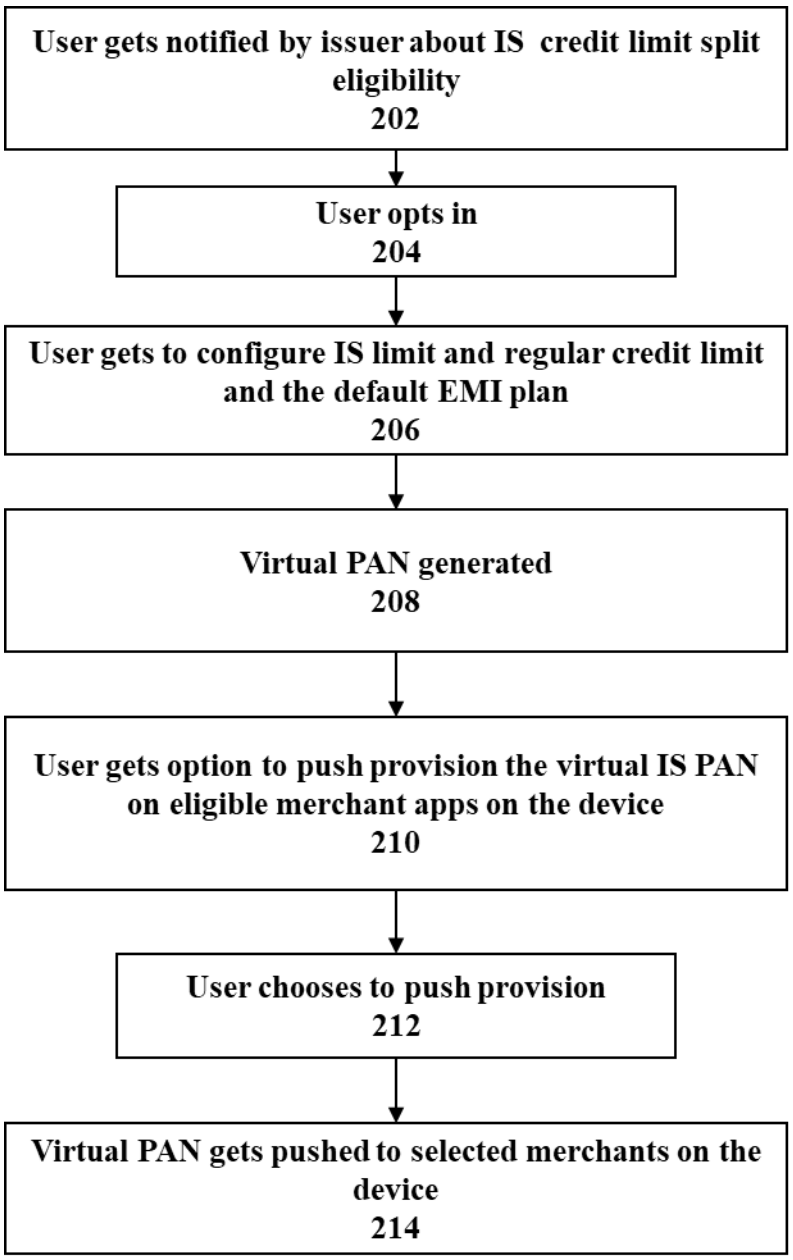
User gets notified by issuer about IS credit limit split eligibility
202
User opts in
204
User gets to configure IS limit and regular credit limit and the default EMI plan
206
Virtual PAN generated
208
User gets option to push provision the virtual IS PAN on eligible merchant apps on the device
210
User chooses to push provision
212
Virtual PAN gets pushed to selected merchants on the device
214
200

Figure 2A

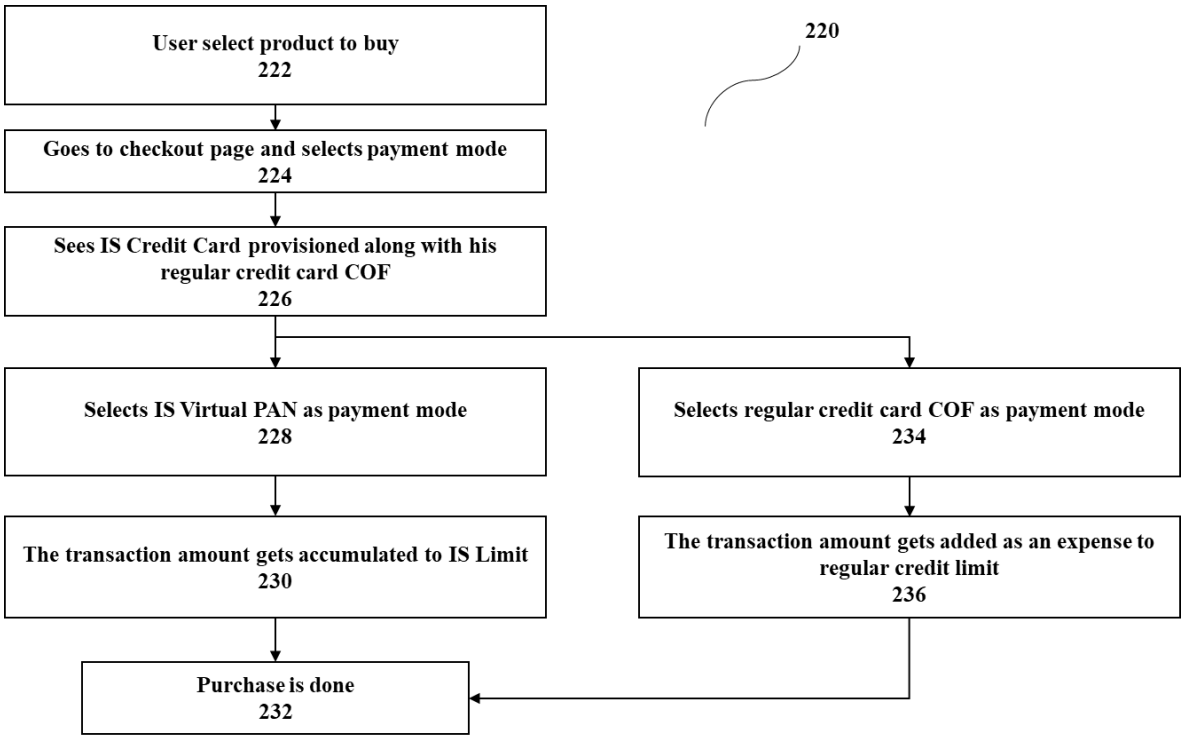
220
User select product to buy
222
Goes to checkout page and selects payment mode
224
Sees IS Credit Card provisioned along with his regular credit card COF
226
Selects IS Virtual PAN as payment mode
228
Selects regular credit card COF as payment mode
234
The transaction amount gets accumulated to IS Limit
230
The transaction amount gets added as an expense to regular credit limit
236
Purchase is done
232

Figure 2B

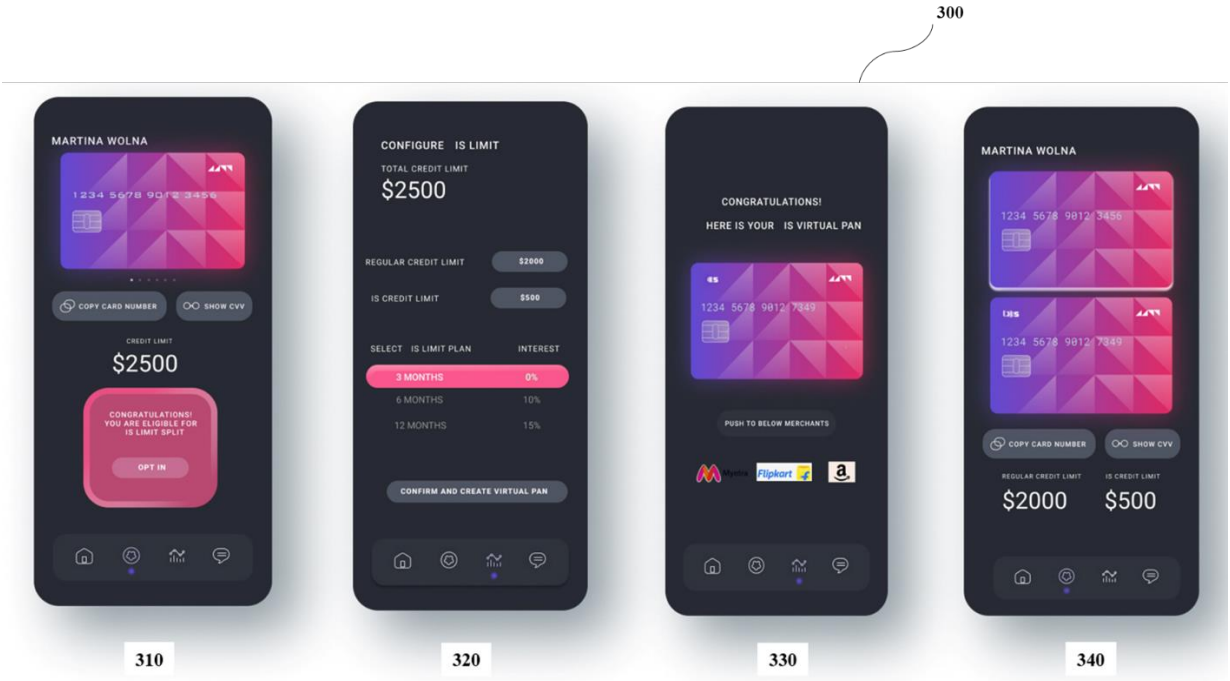
300
MARTINA WOLNA
1234 5678 9012 3456
COPY CARD NUMBER
SHOW CVV
CREDIT LIMIT
$2500
CONGRATULATIONS! YOU ARE ELIGIBLE FOR IS LIMIT SPLIT
OPT IN
310
CONFIGURE IS LIMIT
TOTAL CREDIT LIMIT
$2500
REGULAR CREDIT LIMIT
$2000
IS CREDIT LIMIT
$500
SELECT IS LIMIT PLAN
INTEREST
3 MONTHS
0%
6 MONTHS
10%
12 MONTHS
15%
CONFIRM AND CREATE VIRTUAL PAN
320
CONGRATULATIONS!
HERE IS YOUR IS VIRTUAL PAN
1234 5678 9012 7349
PUSH TO BELOW MERCHANTS
Flipkart
330
MARTINA WOLNA
1234 5678 9012 3456
1234 5678 9012 7349
COPY CARD NUMBER
SHOW CVV
REGULAR CREDIT LIMIT
$2000
IS CREDIT LIMIT
$500
340

Figure 3A

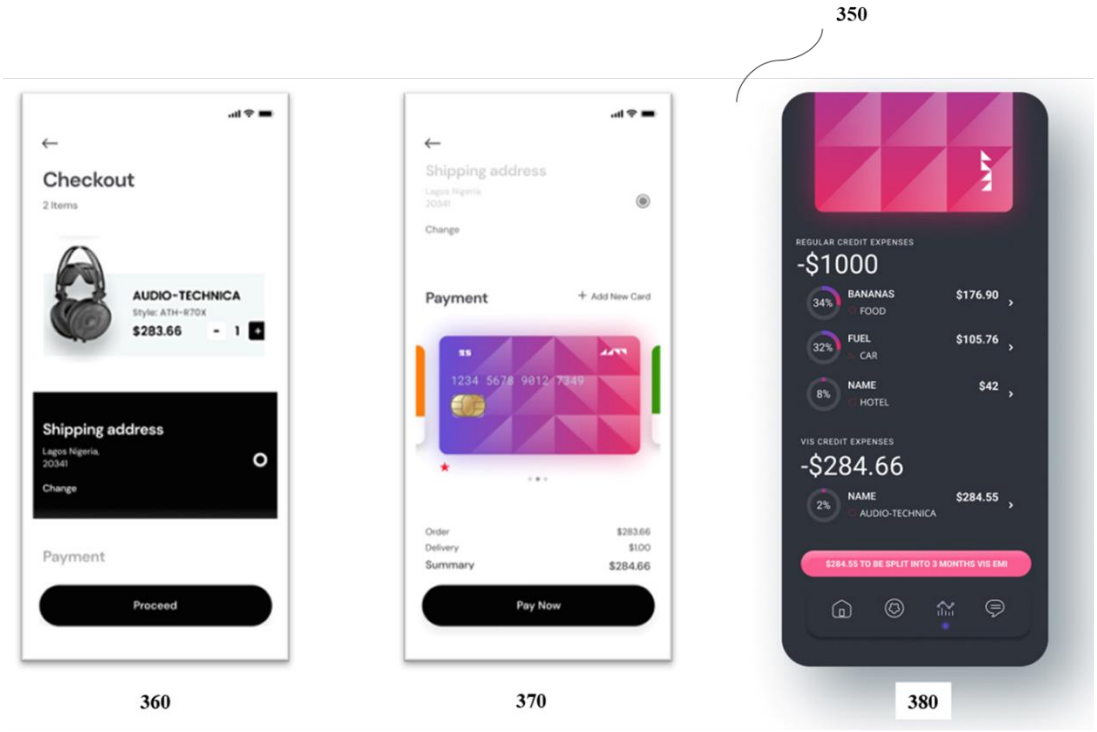
350
Checkout
2 Items
AUDIO-TECHNICA
Style: ATH-R70X
$283.66
Shipping address
Lagos Nigeria,
20341
Change
Payment
Proceed
360
Shipping address
Change
Payment
+ Add New Card
1234 5678 9012 7849
Order
Delivery
Summary
$283.66
$100
$284.66
Pay Now
370
REGULAR CREDIT EXPENSES
-$1000
34%
BANANAS
FOOD
$176.90
32%
FUEL
CAR
$105.76
8%
NAME
HOTEL
$42
VIS CREDIT EXPENSES
-$284.66
2%
NAME
AUDIO-TECHNICA
$284.55
$284.55 TO BE SPLIT INTO 3 MONTHS VIS EMI
380

Figure 3B