

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
22 May 2008 (22.05.2008)

PCT

(10) International Publication Number  
**WO 2008/059465 A2**

(51) International Patent Classification:  
**G06Q 20/00** (2006.01)

(21) International Application Number:  
PCT/IB2007/054678

(22) International Filing Date:  
16 November 2007 (16.11.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
2006/09533 16 November 2006 (16.11.2006) ZA

(71) Applicant (for all designated States except UG, US): **NET 1 UEPS TECHNOLOGIES, INC.** [ZA/ZA]; 4TH Floor, President's Place, Cnr Jan Smuts and Bolton Road Rosebank, 2196 Johannesburg (ZA).

(71) Applicant (for UG only): **NET 1 APPLIED TECHNOLOGIES SOUTH AFRICA LIMITED** [ZA/ZA]; 4th Floor, President's Place, Cnr Jan Smuts Avenue and Bolton Road, Rosebank, 2106 Johannesburg (ZA).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **BELAMANT, Serge, Christian, Pierre** [ZA/ZA]; 43 Carlise Avenue, Hurlingham, 2196 Sandton (ZA).

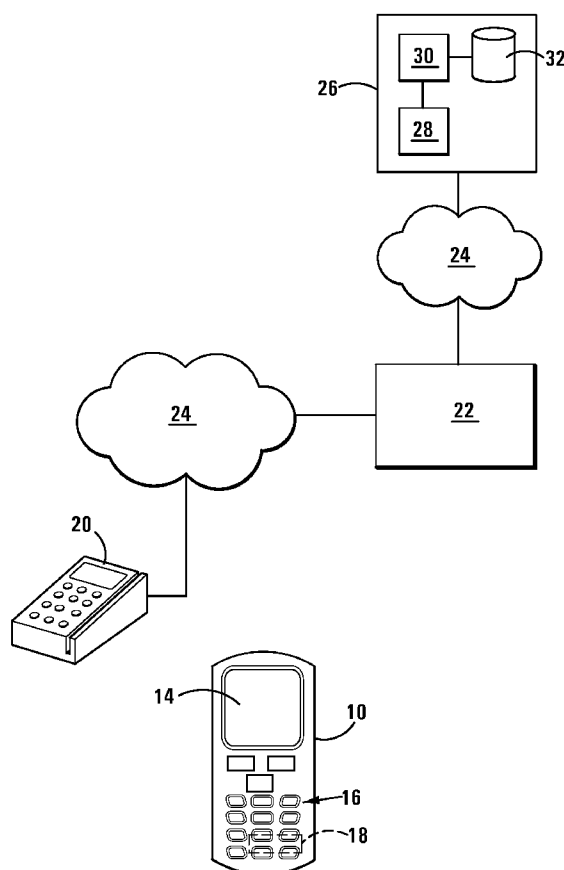
(74) Agent: **LEWIS, Alan**; c/o Adams & Adams, Suite 122, 1st Floor, 60 Riviera Road, Killarney Mall, Killarney, 2193 Johannesburg (ZA).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,

[Continued on next page]

(54) Title: SECURE FINANCIAL TRANSACTIONS



(57) Abstract: a primary account number ("PAN") of a conventional credit or debit account with a bank or other financial institution is emulated or simulated, which incorporates, in encrypted form, the actual account number. The simulated PAN may also incorporate an amount to be debited from that account. Thus, an account number and an amount are encrypted and mapped into a string of digits which appears to be a valid PAN. The actual account number and the transaction amount are thus embedded in the simulated PAN. The simulated PAN is then processed by existing financial transacting infrastructure, with the issuing bank knowing that it is not a PAN and that the appropriate digits are to be decrypted to provide the embedded account number and the embedded amount. In one application, a transactor wishing to effect a financial transaction, generates a simulated PAN and supplies it to a supplier of goods or services from whom he wishes to purchase said goods or services. The supplier enters the simulated PAN and the amount of the transaction in a conventional way. This data is then transmitted to an acquiring bank, which onwardly transmits it to the issuing bank for authorisation. The issuing bank then extracts the embedded account number and embedded amount, checks that the embedded amount and the supplied amount are the same (as well as other conventional checks), and if they are the same authorizes the transaction. Those skilled in the art will appreciate that, in most instances, a transactor is required to provide an expiry date and a card verification value ("CVV"). Either or both of these could also be simulated and used to encrypt information

WO 2008/059465 A2



ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL,  
PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM,  
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— *without international search report and to be republished  
upon receipt of that report*