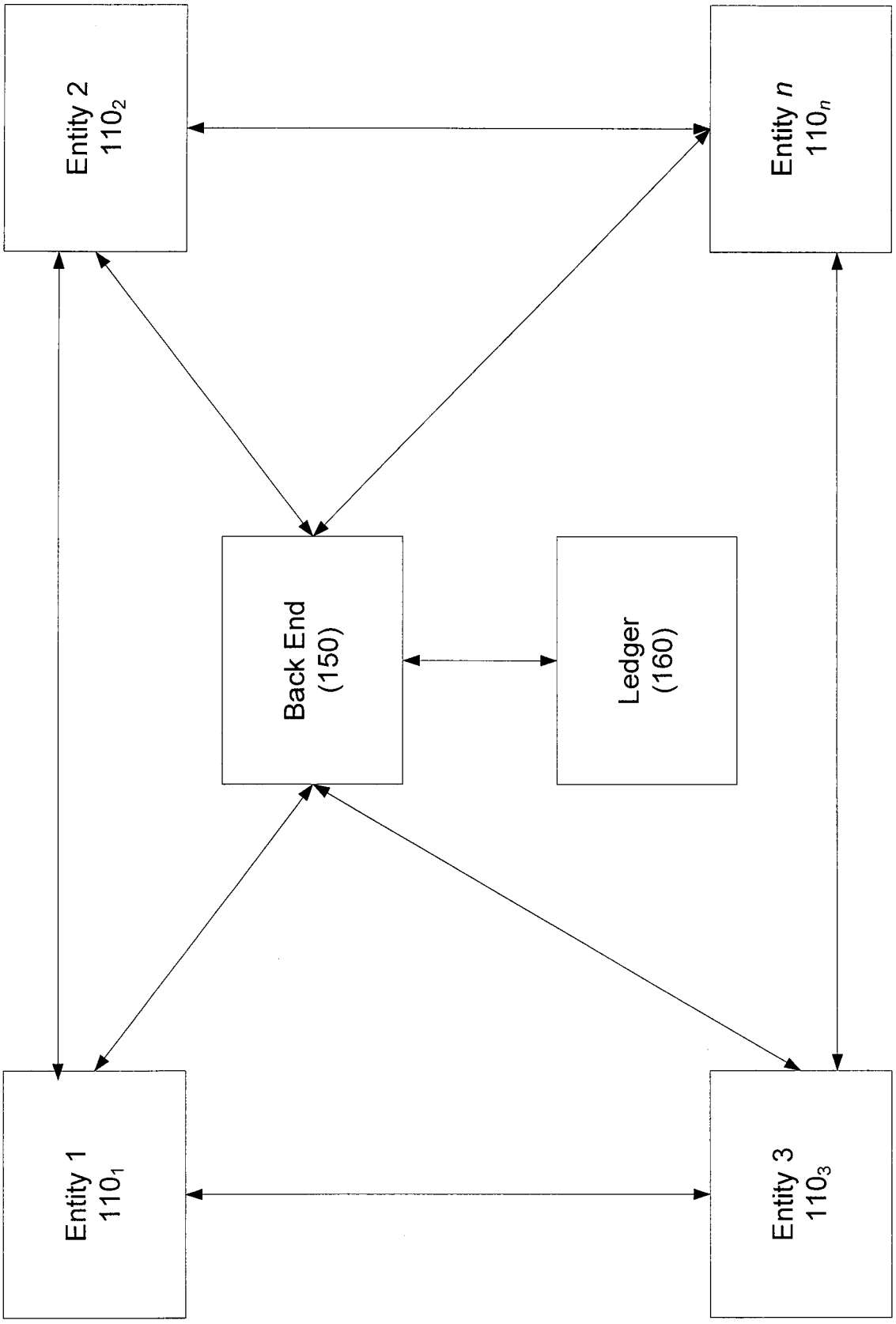

Entity 2
110_2
Entity *n*
110_n
100
Back End
(150)
Ledger
(160)
Entity 1
110_1
Entity 3
110_3

Figure 1

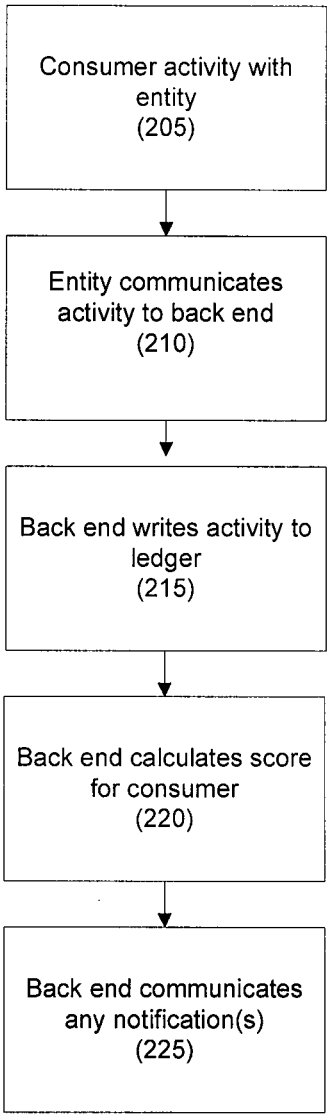

Consumer activity with entity (205)
Entity communicates activity to back end (210)
Back end writes activity to ledger (215)
Back end calculates score for consumer (220)
Back end communicates any notification(s) (225)

Figure 2

Date	Party	Transaction	Account	Txn id	Data
01/30/2016	Mortgage	New Customer	ECI = 11111111	1	ECI #
01/30/2016	Credit Risk (listening for the new customer)	Set/offer Credit Lines	ECI = 11111111	1.1	(look at Credit Risk analytics design) (and Credit Bureau interface) Account balances D&I Credit Score Auto limit Revolving limit Mortgage limit Total exposure limit
	MX Mortgage	Inquiry on ECI 1111111111			Returns the credit score, balances and limits that MX Mortgage is entitled to read
02/15/2016	Mortgage	Request approval for 10K loan	ECI = 11111111	2	(Look at credit decision interface, such as Zippy, to see what fields place)
02/15/2016	Credit Risk	Approval	ECI = 11111111	2.1	Look at credit decision interface + Balance adjustments (credit risk analytics outcomes)
04/30/2016	Fraud Investigations	ID theft Fraud	ECI = 11111111	3	Smart contract changes all loan limits to 0; any loan requires manual review and customer validation until lifted
5/31/2016	POS Auth	Credit card compromised	ECI = 22222222	4	Smart contract changes the 'open to buy' to $O for the credit card belonging to ECI=222222222

Figure 3

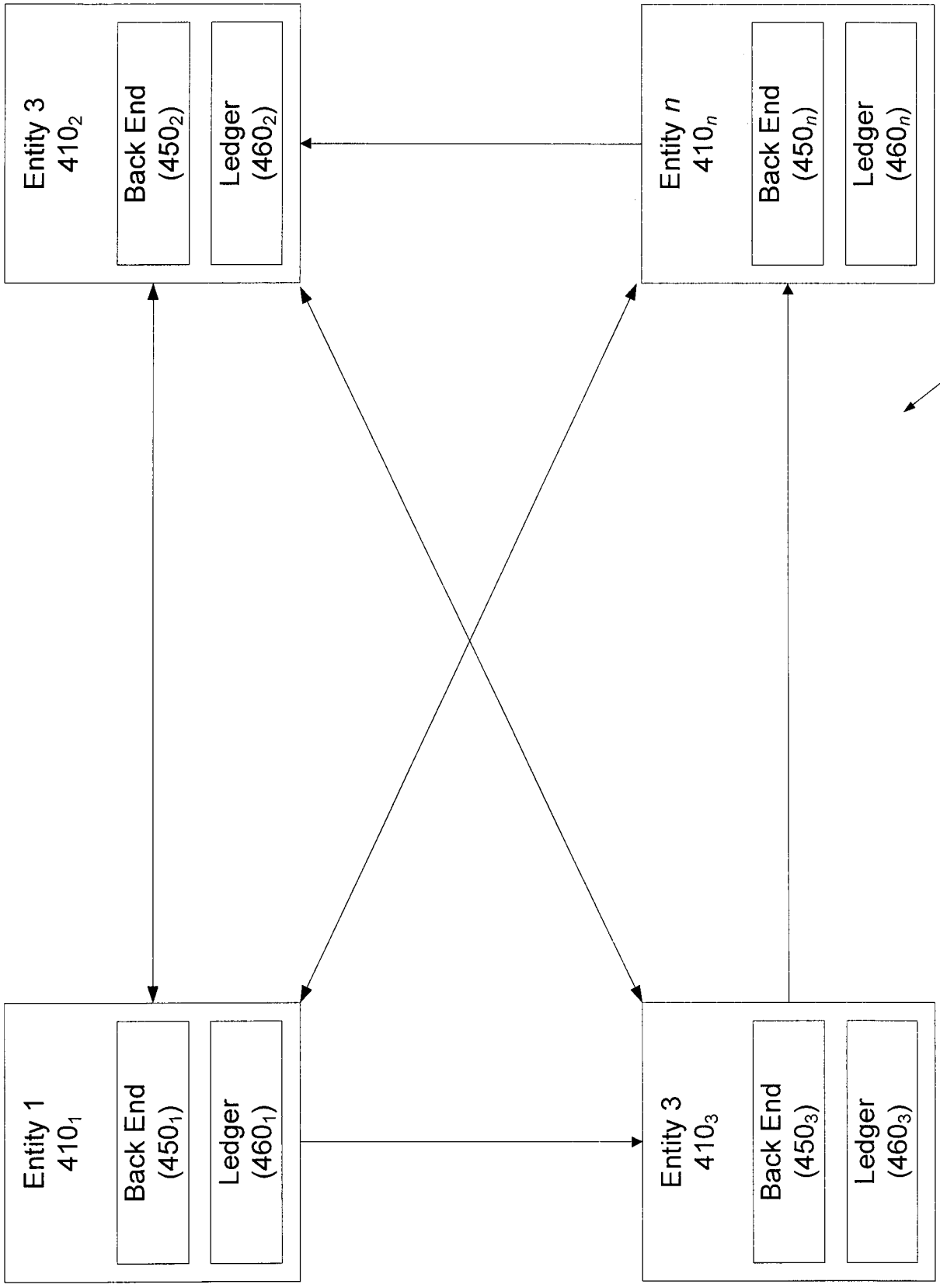

Entity 3
410_2
Back End
(450_2)
Ledger
(460_2)
Entity n
410_n
Back End
(450_n)
Ledger
(460_n)
400
Entity 1
410_1
Back End
(450_1)
Ledger
(460_1)
Entity 3
410_3
Back End
(450_3)
Ledger
(460_3)

Figure 4

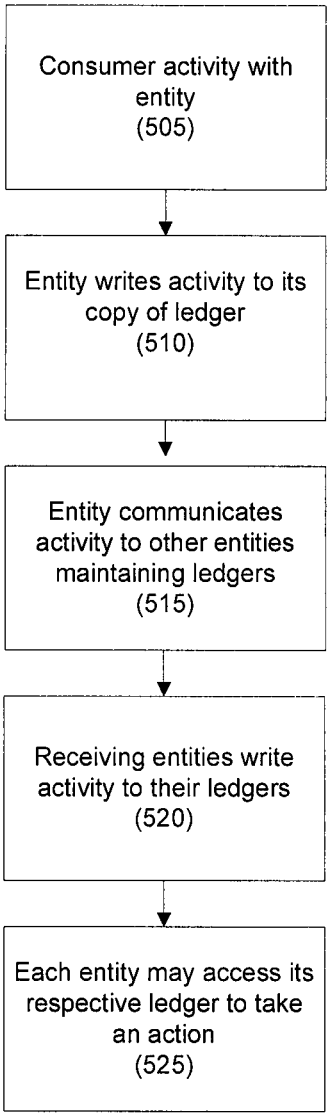

Consumer activity with entity (505)
Entity writes activity to its copy of ledger (510)
Entity communicates activity to other entities maintaining ledgers (515)
Receiving entities write activity to their ledgers (520)
Each entity may access its respective ledger to take an action (525)

Figure 5

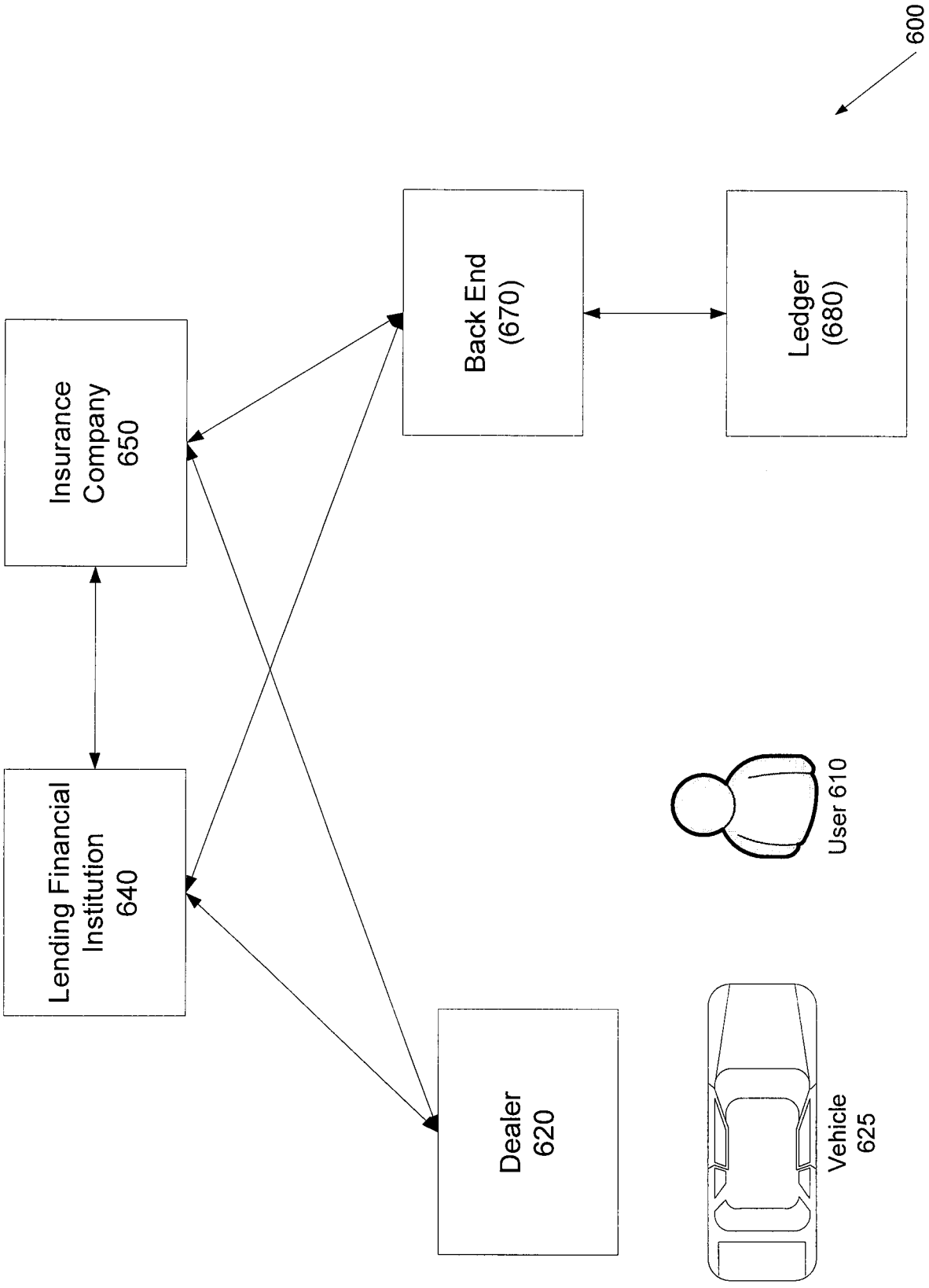

600
Back End
(670)
Ledger
(680)
Insurance
Company
650
Lending Financial
Institution
640
Dealer
620
User 610
Vehicle
625

Figure 6

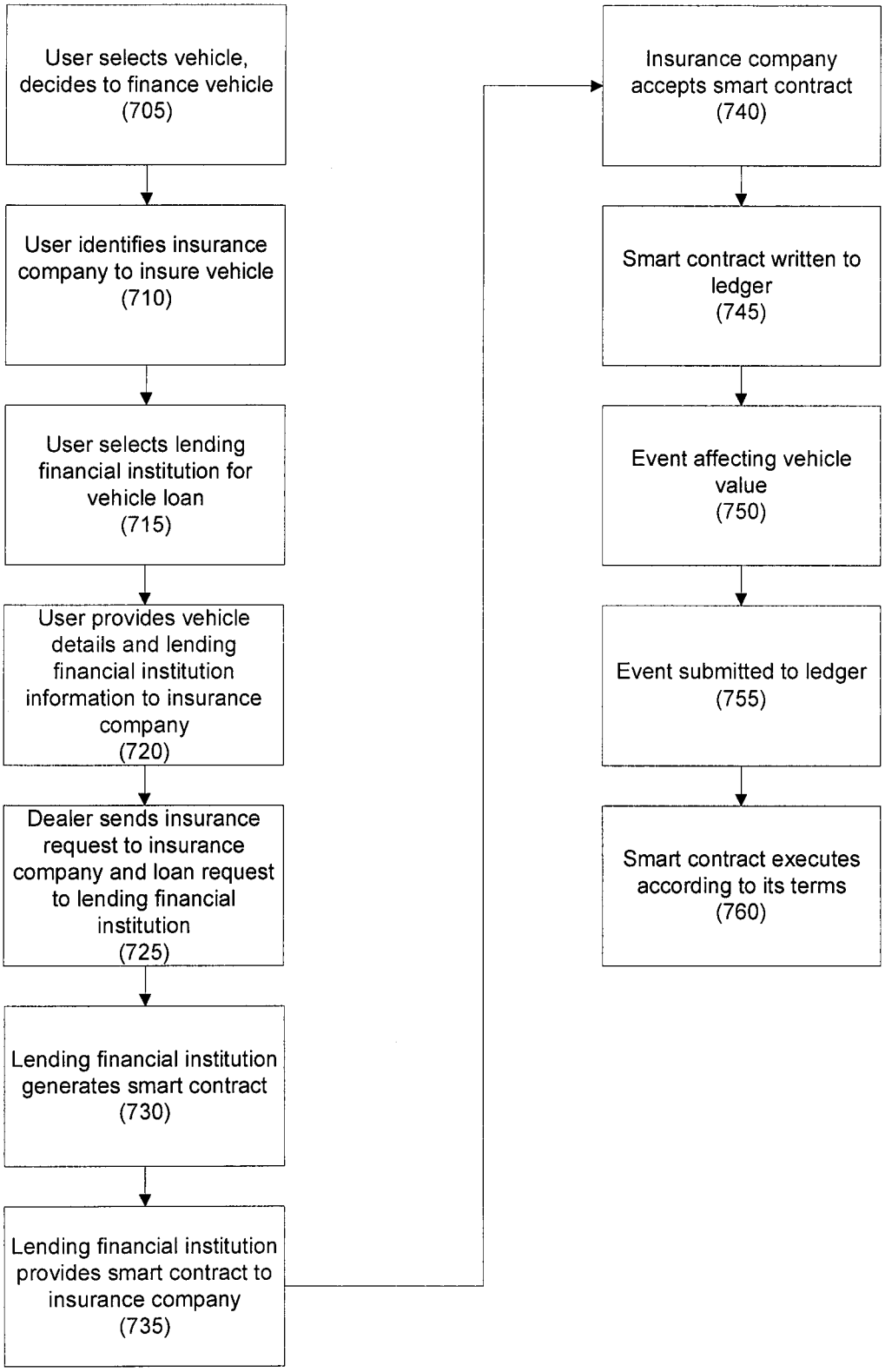

User selects vehicle, decides to finance vehicle (705)
User identifies insurance company to insure vehicle (710)
User selects lending financial institution for vehicle loan (715)
User provides vehicle details and lending financial institution information to insurance company (720)
Dealer sends insurance request to insurance company and loan request to lending financial institution (725)
Lending financial institution generates smart contract (730)
Lending financial institution provides smart contract to insurance company (735)
Insurance company accepts smart contract (740)
Smart contract written to ledger (745)
Event affecting vehicle value (750)
Event submitted to ledger (755)
Smart contract executes according to its terms (760)

Figure 7