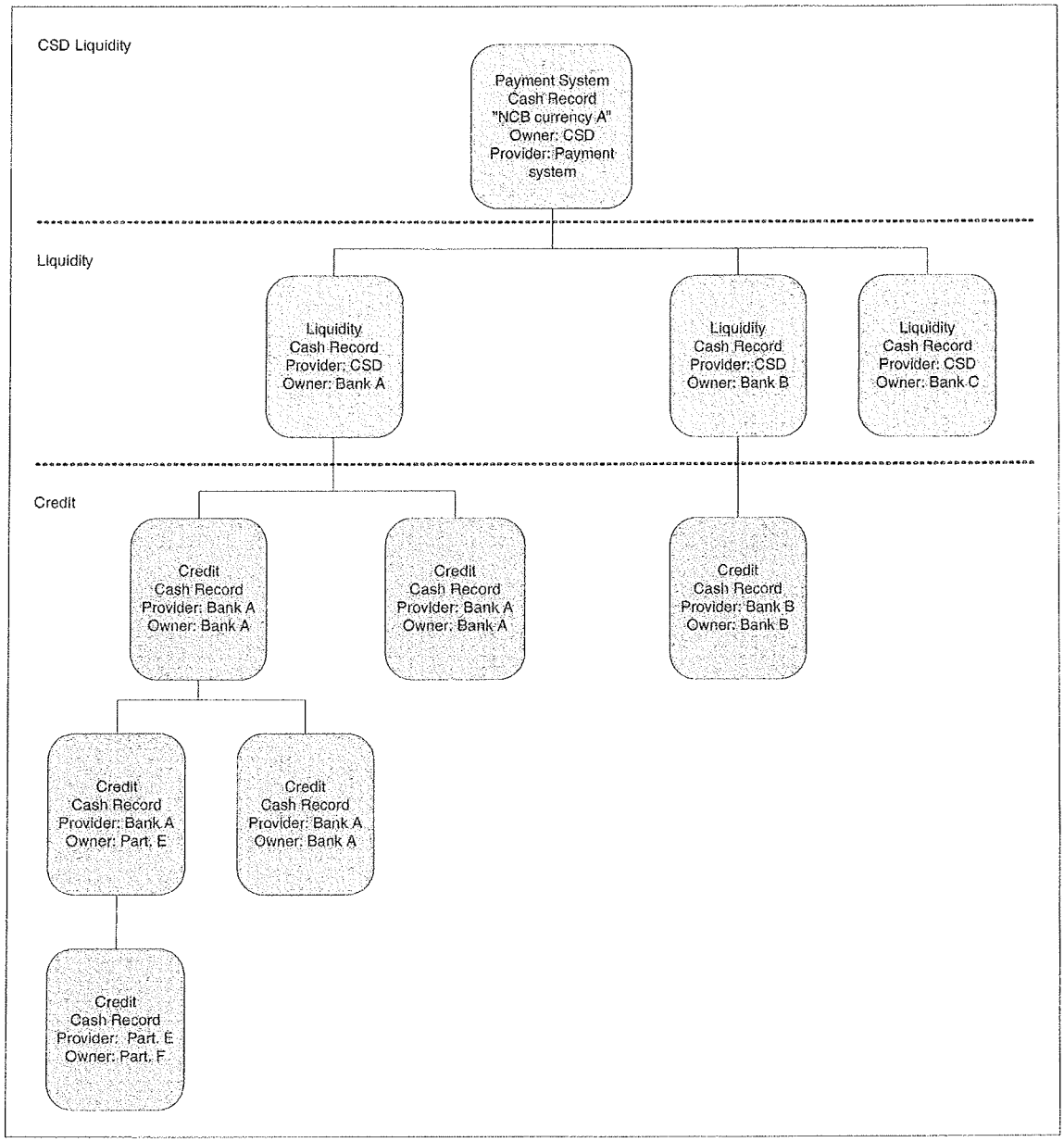

CSD Liquidity
Payment System Cash Record "NCB currency A" Owner: CSD Provider: Payment system
Liquidity
Liquidity Cash Record Provider: CSD Owner: Bank A
Liquidity Cash Record Provider: CSD Owner: Bank B
Liquidity Cash Record Provider: CSD Owner: Bank C
Credit
Credit Cash Record Provider: Bank A Owner: Bank A
Credit Cash Record Provider: Bank A Owner: Bank A
Credit Cash Record Provider: Bank B Owner: Bank B
Credit Cash Record Provider: Bank A Owner: Part. E
Credit Cash Record Provider: Bank A Owner: Bank A
Credit Cash Record Provider: Part. E Owner: Part. F

FIG. 1

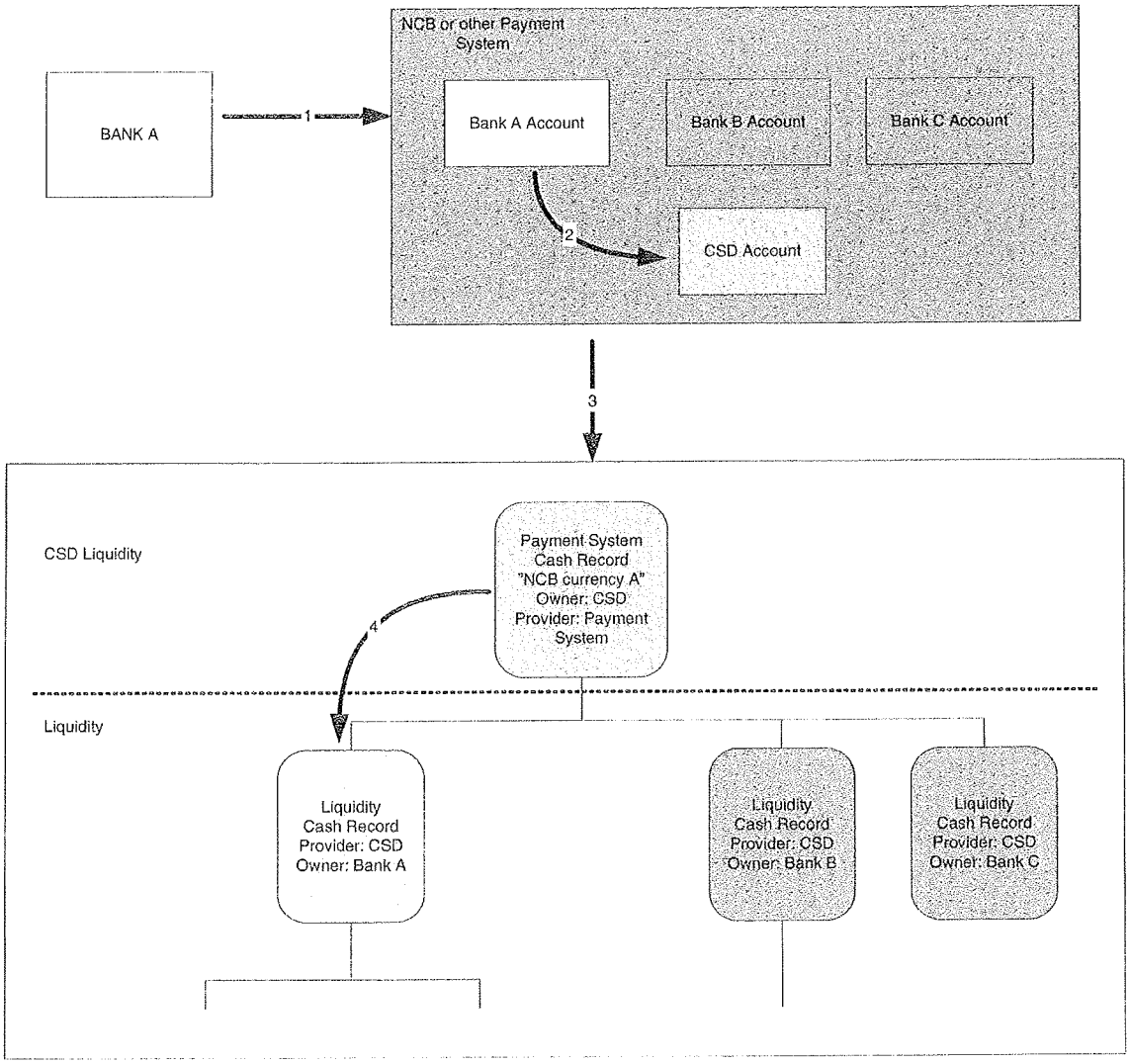

NCB or other Payment System
BANK A
1
Bank A Account
Bank B Account
Bank C Account
2
CSD Account
3
CSD Liquidity
Payment System Cash Record "NCB currency A" Owner: CSD Provider: Payment System
4
Liquidity
Liquidity Cash Record Provider: CSD Owner: Bank A
Liquidity Cash Record Provider: CSD Owner: Bank B
Liquidity Cash Record Provider: CSD Owner: Bank C

FIG. 2

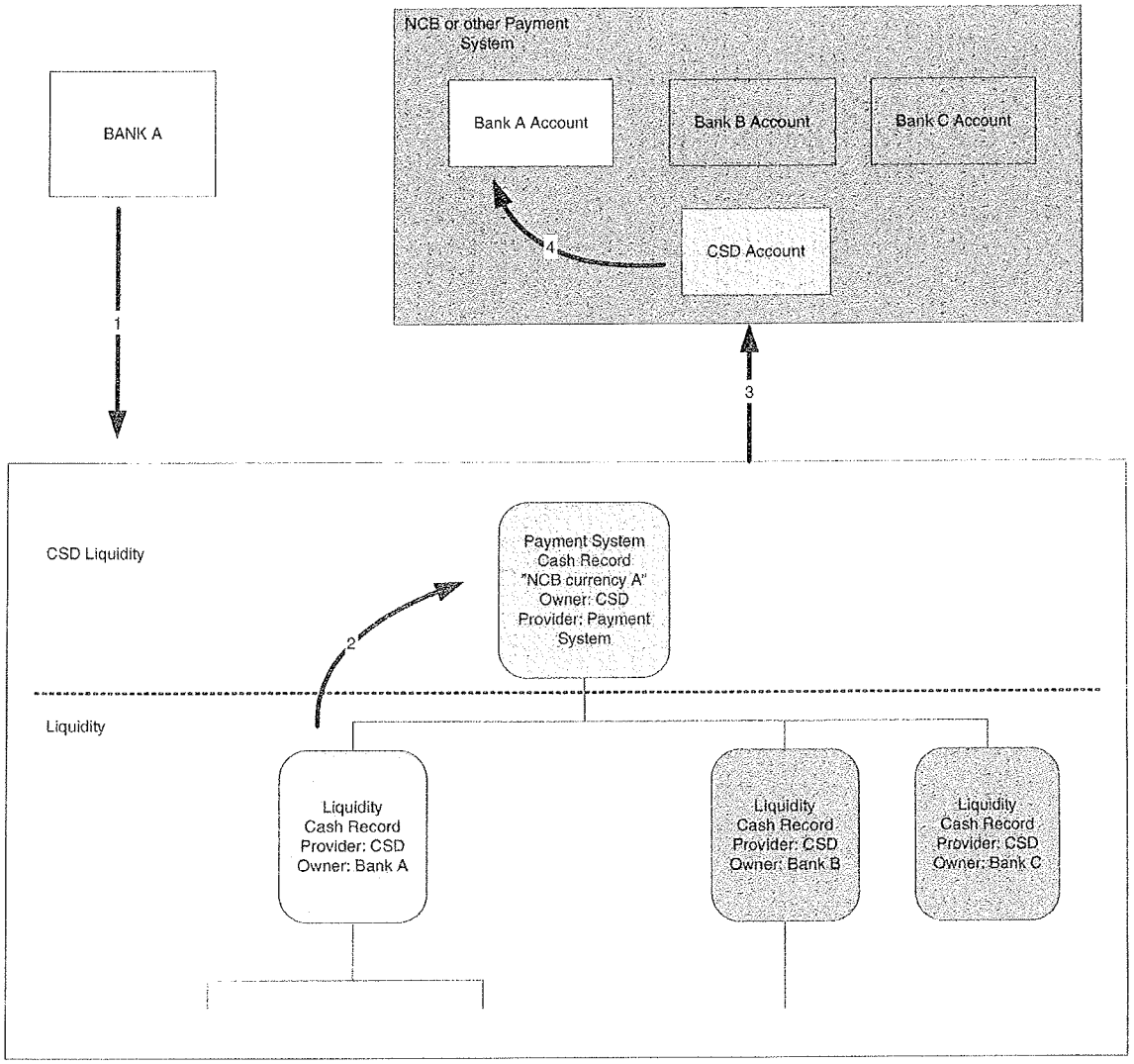

NCB or other Payment System
Bank A Account
Bank B Account
Bank C Account
CSD Account
BANK A
1
2
3
4
CSD Liquidity
Payment System Cash Record "NCB currency A" Owner: CSD Provider: Payment System
Liquidity
Liquidity Cash Record Provider: CSD Owner: Bank A
Liquidity Cash Record Provider: CSD Owner: Bank B
Liquidity Cash Record Provider: CSD Owner: Bank C

FIG. 3

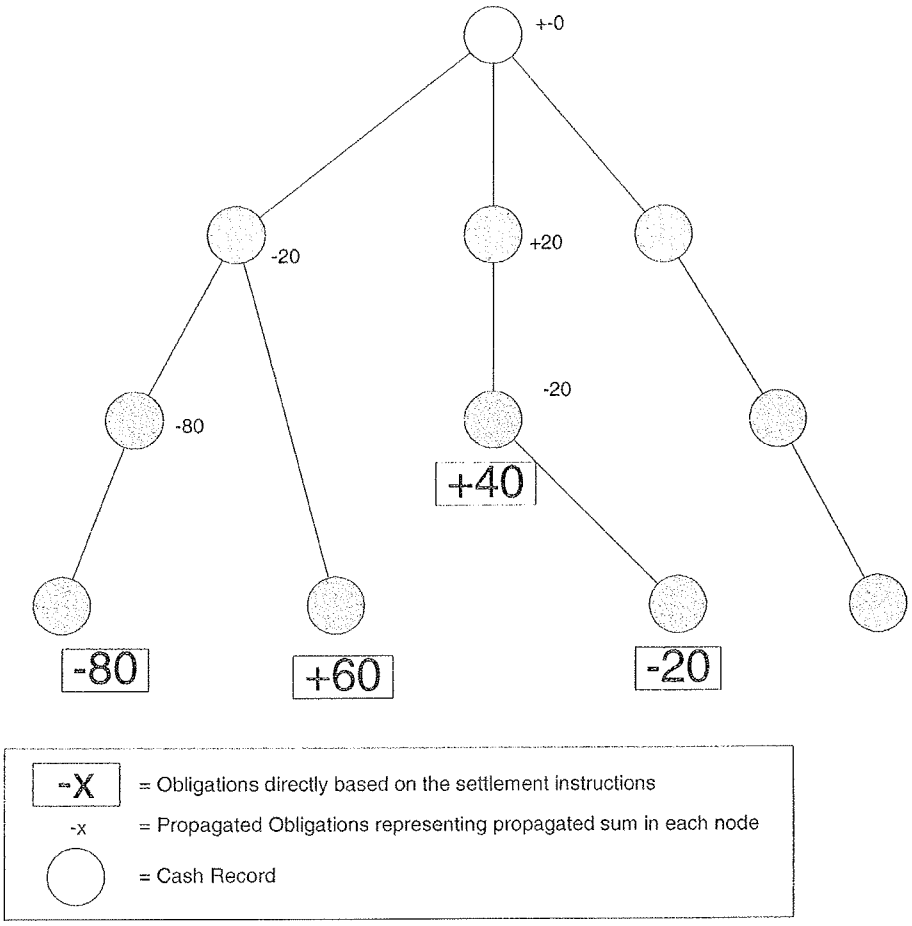
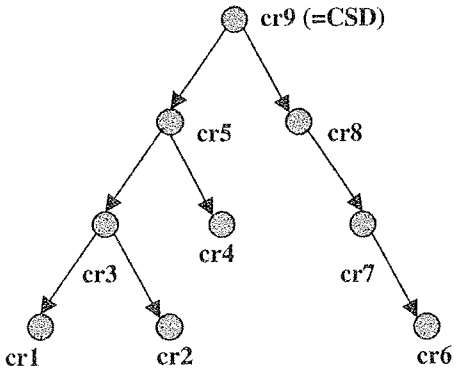
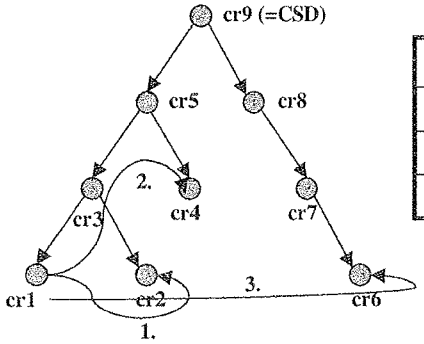

+-0
-20
+20
-80
-20
+40
-80
+60
-20
-X
= Obligations directly based on the settlement instructions
-x
= Propagated Obligations representing propagated sum in each node
= Cash Record

FIG. 4



Cash Record	Balance	Limit
cr1	0	1000 000
cr2	0	1000 000
cr3	0	1000 000
cr4	0	0
cr5	500 000	1000 000
cr6	0	1000 000
cr7	0	1000 000
cr8	700 000	0
cr9	-1200 000	1000 000 000 000

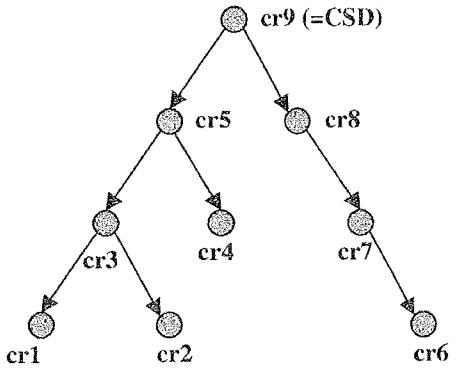
FIG. 5



Trade	Debit	Credit
1. (cr1→cr2, 1000)	cr1 -= 1000	cr2 += 1000
2. (cr1→cr4, 2000)	cr1, cr3 -= 2000	cr4 += 2000
3. (crl→cr6, 3000)	cr1, cr3, cr5 -= 3000	cr8,cr7,cr6 += 3000

Cash Record	Available cash
cr1	994 000
cr2	1 001 000
cr3	995 000
cr4	1 002 000
cr5	497 000
cr6	1 003 000
cr7	1 003 000
cr8	703 000
cr9	-1 200 000

FIG. 6



Settlement Obligation	Debit/Credit
SO1	cr1 -= 100
SO2	cr2 += 20
SO3	cr5 += 50
SO4	cr4 += 40
SO5	cr7 += 10
SO6	cr6 -= 20

FIG. 7

Propagating Obligation	Gross	Net
PO1	cr3 -= 100	-100+20 = -80
PO2	cr5 -= 100	-100+20+40 = -40
PO3	cr9 -= 100	-100-20+20+50+40+10 = 0
PO4	cr7 -= 20	-20
PO5	cr8 -= 20	-20+10 = -10
~~PO6~~	~~cr9 -= 20~~	
~~PO7~~	~~cr3 += 20~~	
~~PO8~~	~~cr5 += 20~~	
PO9	cr9 += 20	
~~PO10~~	~~cr9 += 50~~	
~~PO11~~	~~cr5 += 40~~	
~~PO12~~	~~cr9 += 40~~	
~~PO13~~	~~cr8 += 10~~	~~10~~
~~PO14~~	~~cr9 += 10~~	

FIG. 8

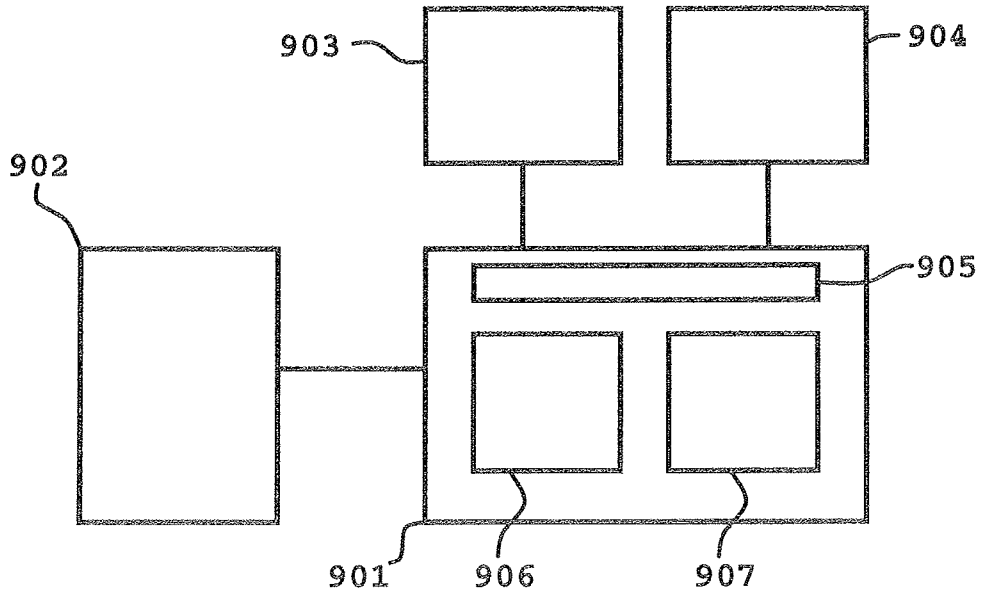


FIG. 9