

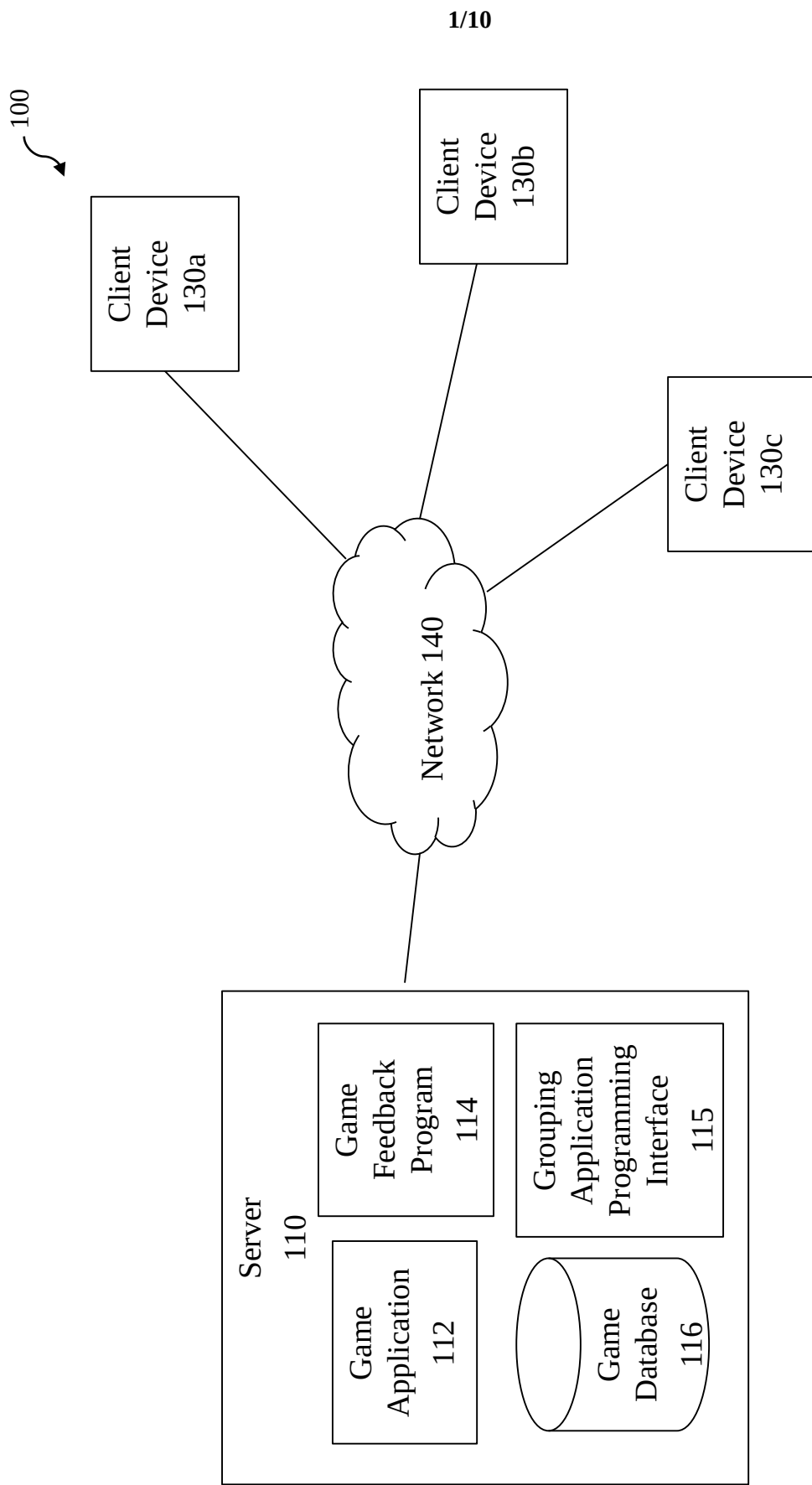


FIG. 1

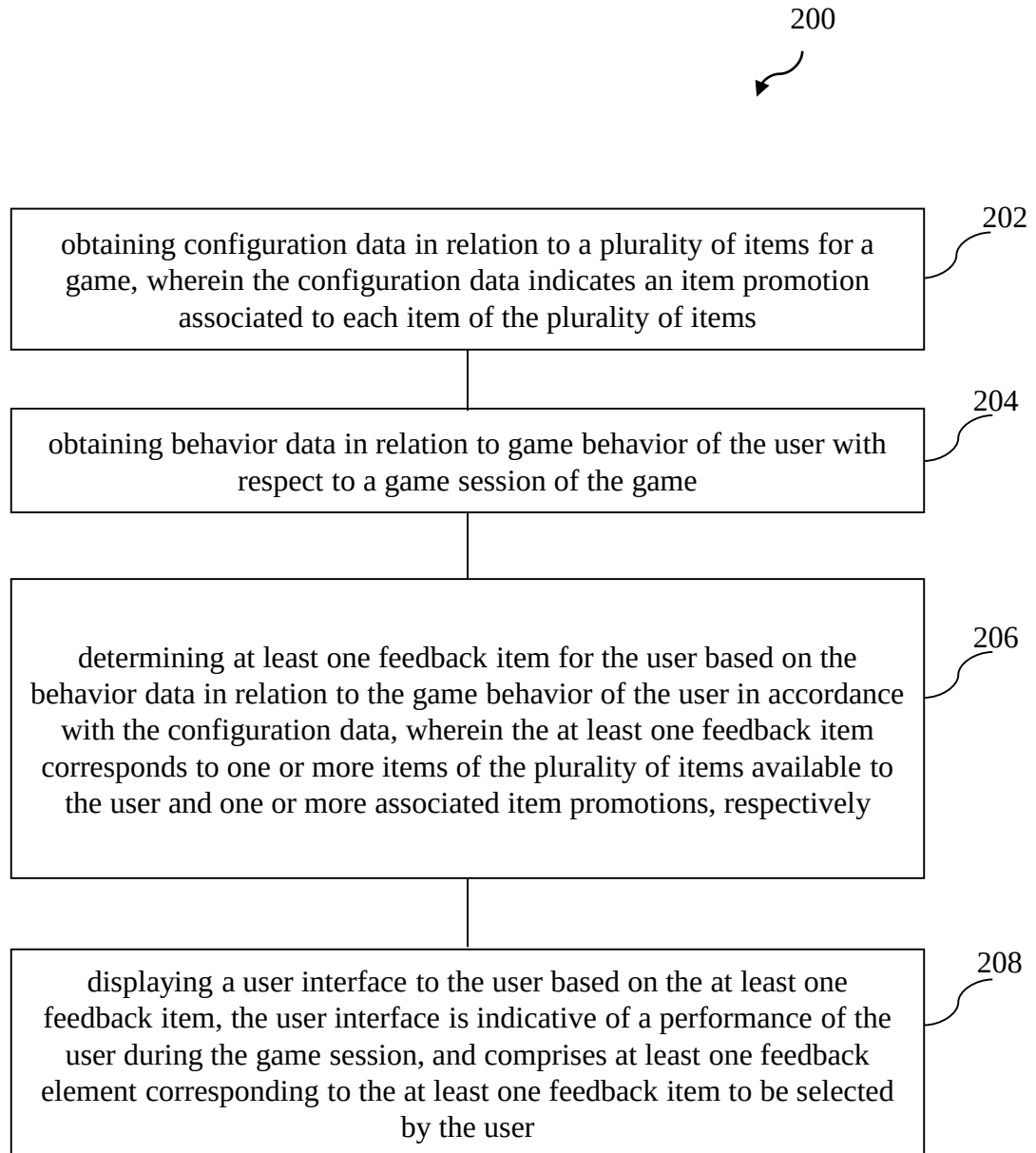


FIG. 2

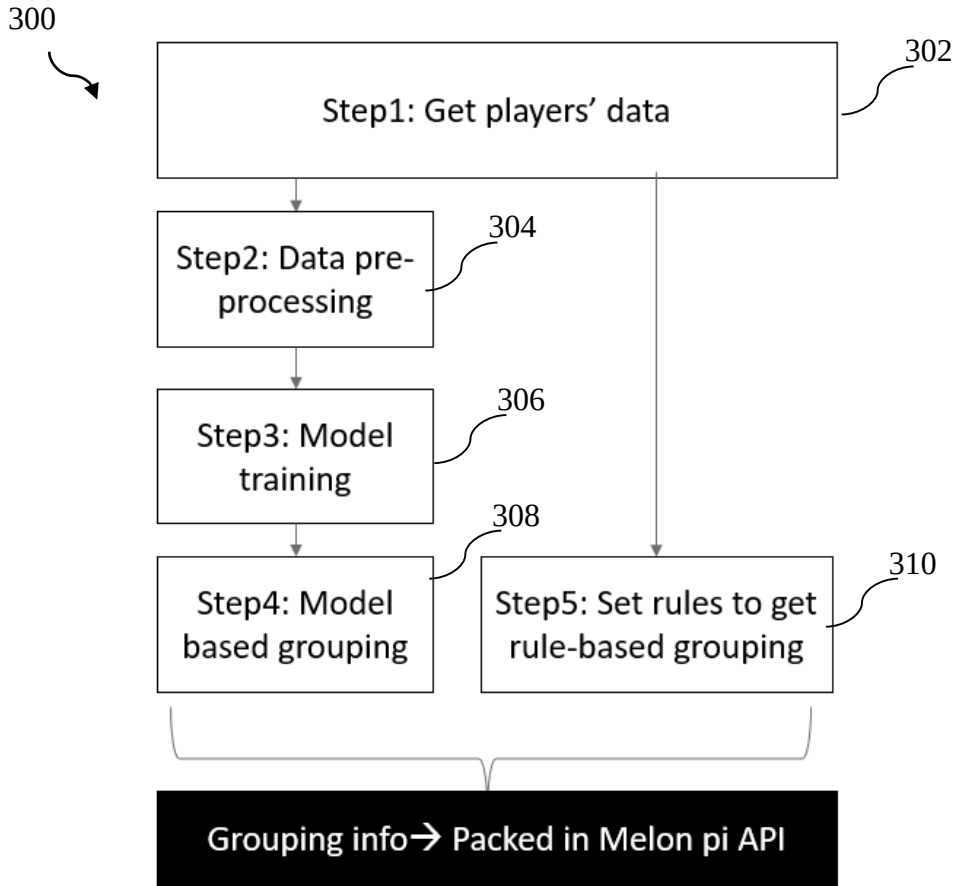


FIG. 3A

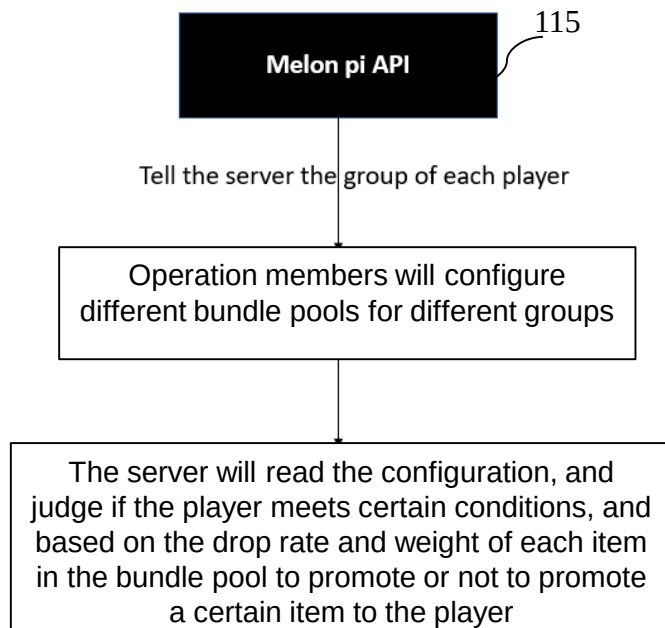


FIG. 3B

400

Group	Group Definition	Grouping criteria
A	Paid more than a certain amount of USD in the past 30 days, and not in group E	Rule-based
B	Paid more than a certain amount of USD in the past 30 days, and not in group E/A	Rule-based
C	Paid more than a certain amount of USD in the past 30 days, and not in group E/A/B	Rule-based
D	Paid more than a certain amount of USD in the past 30 days, and not in group E/A/B/C	Rule-based
E	Churned paid users	Rule-based
F	Paying probability ≥ 0.7	Machine learning based
G	$0.3 \leq$ Paying probability < 0.7	Machine learning based
H	Paying probability < 0.3	Machine learning based
Z	Others	Rule-based

FIG. 4

500

A		B	C	D		E	F	G	H	I
1	StoreID	BundleID	BundleName	PriceltemID	Price	DiscountPrice	RebateID	DiscountPrice	ItemID	DiamondPrice
3	1500	700000355	Special Collection Package	1585	14.99	1500	1500	4.99	1499	1499
4	1501	700000355	Special Collection Package	1585	14.99	1501	1501	2.99	1499	1499
5	1502	700000355	Special Collection Package	1585	14.99	1502	1502	0.99	1499	1499
6	1503	700000355	Special Collection Package	1585	14.99	1503	1503	0.99	1499	1499
7	1504	700000355	Special Collection Package	1585	14.99	1504	1504	0.99	1499	1499
8	1505	700000356	Robot Package	1586	14.99	1505	1505	7.99	1499	1499
9	1506	700000356	Robot Package	1586	14.99	1506	1506	2.99	1499	1499
10	1507	700000356	Robot Package	1586	14.99	1507	1507	0.99	1499	1499
11	1508	700000356	Robot Package	1586	14.99	1508	1508	0.99	1499	1499
12	1509	700000357	Robot Package	1587	14.99	1509	1509	7.99	1499	1499
13	1510	700000357	Robot Package	1587	14.99	1510	1510	2.99	1499	1499
14	1511	700000357	Robot Package	1587	14.99	1511	1511	0.99	1499	1499
15	1512	700000357	Robot Package	1588	20.99	1512	1512	0.99		
16	1513	700000358	Mix Gun Skin Package (power region)	1589	12.99	1513	1513	7.99		
17	1514	700000358	Mix Gun Skin Package (power region)	1589	12.99	1514	1514	4.99		
18	1515	700000358	Mix Gun Skin Package (power region)	1589	12.99	1515	1515	0.99		
19	1516	700000358	Mix Gun Skin Package (power region)	1589	12.99	1516	1516	0.99		

FIG. 5

600



FIG. 6

Parameters	Explanation
BundlePoolID	The ID of the bundle pool
StartTime	The start time of the effective time
EndTime	The end time of the effective time
ExistTime	How long the item promotion will last before it disappears
CD Time	Cool down time
MatchMode	Including 1- Casual, 2 – Rank
MapID	Map ID
GroupMode	0-solo,1-duo,3-multiple
Rank	The players' rank
MinPlayerLevel	Only when the player's level is higher than a certain level, the bundle will show
MaxPlayerLevel	Only when the player's level is lower than a certain level, the bundle will show
MinRankingLevel	Only when the player's ranking is higher than a certain level, the bundle will show
PaidLevel	1- Never paid, 2- Small paid, 3- Medium paid, 4- Big paid, 5 Paid before, but don't pay for 30 days
IsEPUnlock	0-no,1-yes
Drop situation	1- after a match, 2- after top-up, 3 – after gaining an item
MelonPI API Class	The machine-learning based and rule-based grouping
Droprate	The drop rate of the special promotion

FIG. 7

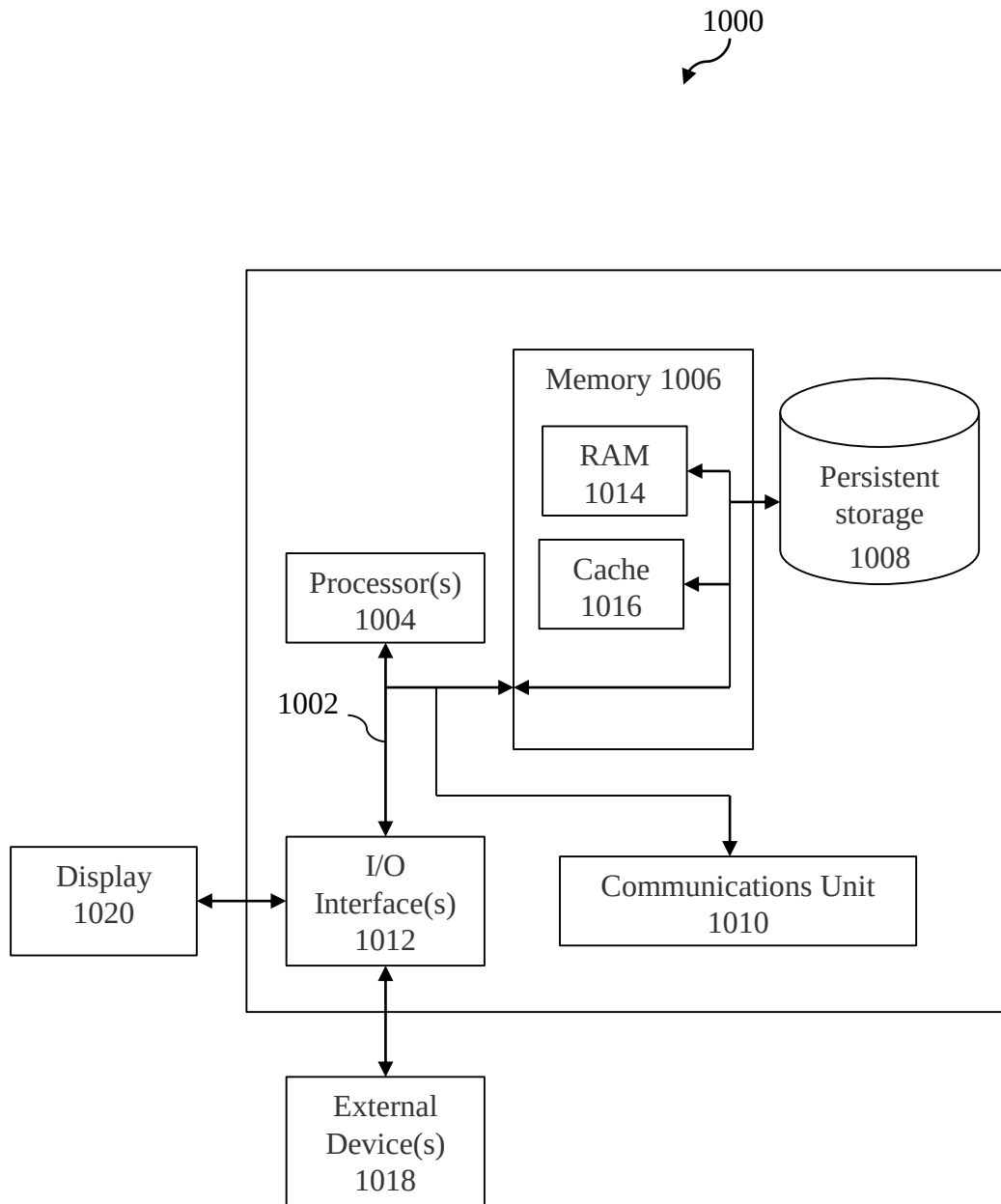
800 ↘

BundlePoolID	Store ID	StoreName	Discount	Weight
The ID of the item pool	The ID of the item	The name of the item	Discount	Weight
1	2	Item1	8	4
1	5	Item2	9	3
1	7	Item3	3	10
2	3	Item4	2	1
2	6	Item5	2	1
2	7	Item6	3	1

FIG. 8

Store ID	Bundle ID	Bundle Name	Price	DiscountPrice	DiamondPrice	DiscountDiamondPrice	Discount	Diamond Bonus	NonConsumable
The ID of the item pool	The ID of the item	The name of the item	Original price USD	Price after the discount USD	Original Price in diamond	Price in diamond after the discount	Discount	Extra diamonds to get	0-Drop only once, 1- Can drop several times
1	700000001	Item1	10	9	10	9	9	0	0
2	700000001	Item1	10	8	10	8	8	0	0
3	700000001	Item1	10	2	10	2	2	0	0
4	700000002	Item2	100	50	100	50	5	10	1
5	700000002	Item2	100	80	100	80	8	10	1
6	700000003	Item3	100	20	100	20	2	10	1

FIG. 9

**FIG. 10**