

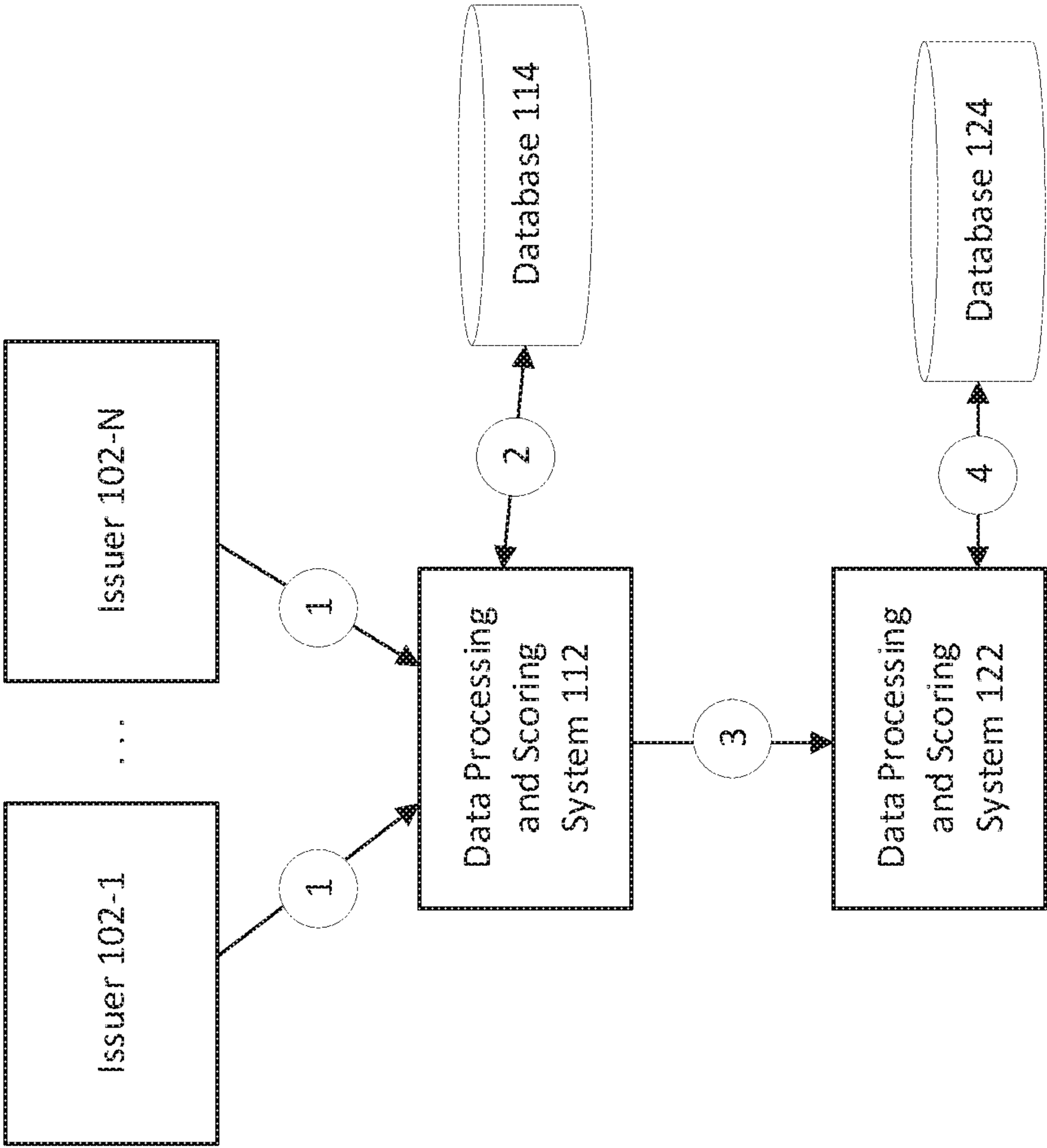


FIG. 1

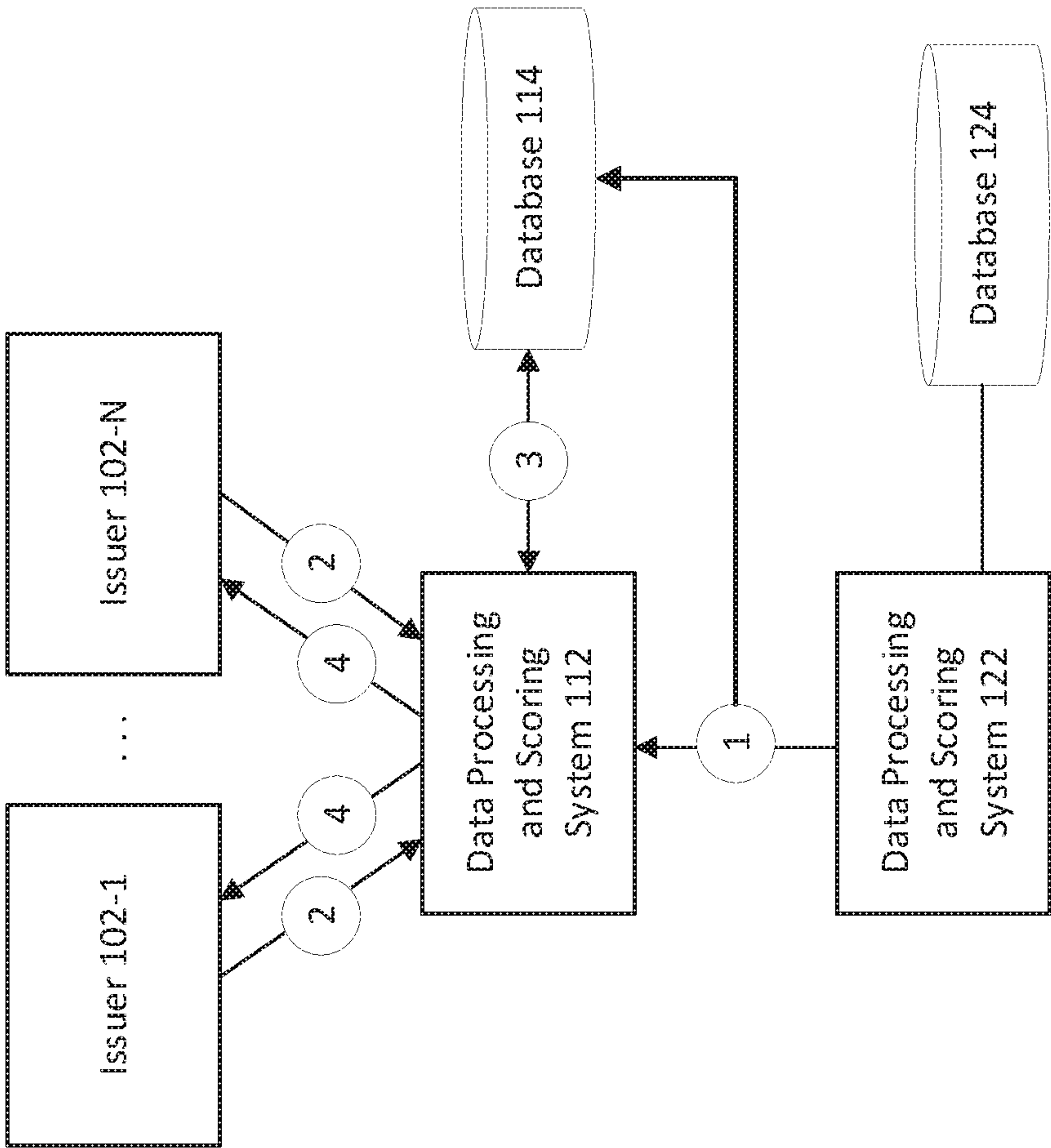


FIG. 2

<u>Feature Type</u>	<u>Feature</u>	<u>Variable Type</u>
Card	302/ Number of months since first transaction; if >12 then '12'	Single Variable
	304/ Bank Relations; if appl. Issuer is main in terms of tx count over last 12 months then '1', else '0'	Single Variable
	306/ Transactions Activation in top risk MCCs; at least 1 tx at pawn shops, betting, security brokers over last 12 months then '1', else '0'	Cross Variable 320
	308/ Average ticket size in POS tx for last 12 months	
	310/ Share of medical (specific MCCs) volume out of all POS tx during last 12 months	Cross Variable 322
	312/ Share of construction (specific MCCs) volume out of all POS tx during last 12 months	
	314/ Upscale consistency; number of months with at least one tx in upscale (specific MCCs)	Cross Variable 324
Authorizations	316/ Insufficient funds decline rate; average number of insufficient funds declines per active month	

FIG. 3

400

SIGMA (Intercept + (ATS>0) × beta_1 + (ATS>300) × beta_2 + (ATS>400) × beta_3 + (ATS>600) × beta_4 + (months_with_Visa>0) × gamma_1 + (months_with_Visa>6) × gamma_2 + (upscale>0) × delta_1 + (upscale>1) × delta_2 + (upscale>2) × delta_3 + (upscale>3) × delta_4 + (upscale>4) × delta_5 + (upscale>5) × delta_6 + relationship × epsilon + (share>0) × zeta_1 + (share>1) × zeta_2) = PROBABILITY_OF_DEFAULT

FIG. 4

<u>Feature Type</u>	<u>Feature</u>	<u>Ex. #1</u>	<u>Ex. #2</u>
Card	302/ Number of months since first transaction; if >12 then '12'	13 months	3 months
	304/ Bank Relations; if appl. Issuer is main in terms of tx count over last 12 months then '1', else '0'	Main	Not Main
	306/ Transactions Activation in top risk MCCs; at least 1 tx at pawn shops, betting, security brokers over last 12 months then '1', else '0'	Not Active	Active
	308/ Average ticket size in POS tx for last 12 months	700P	332P
	310/ Share of medical (specific MCCs) volume out of all POS tx during last 12 months	0.1	0.18
	312/ Share of construction (specific MCCs) volume out of all POS tx during last 12 months	0.02	0.01
	314/ Upscale consistency; number of months with at least one tx in upscale (specific MCCs)	9	1
Authorizations	316/ Insufficient funds decline rate; average number of insufficient funds declines per active month	0	1.5

FIG. 5

<u>Feature Type</u>	<u>Feature</u>	<u>Ex. #1</u>	<u>Ex. #2</u>
Card	302/ Number of months since first transaction; if >12 then '12'	>6	>0
	304/ Bank Relations; if appl. Issuer is main in terms of tx count over last 12 months then '1', else '0'	1	0
	306/ Transactions Activation in top risk MCCs; at least 1 tx at pawn shops, betting, security brokers over last 12 months then '1', else '0'	GR = 600	GR = 300
	308/ Average ticket size in POS tx for last 12 months		
	310/ Share of medical (specific MCCs) volume out of all POS tx during last 12 months	GR = 100	GR = 100
	312/ Share of construction (specific MCCs) volume out of all POS tx during last 12 months		
	314/ Upscale consistency; number of months with at least one tx in upscale (specific MCCs)	GR = 6	GR = 1
Authorizations	316/ Insufficient funds decline rate; average number of insufficient funds declines per active month		

FIG. 6

Parameter	Value	Coefficient	E.g. #1	E.g. #2
Intercept		-5.00	1	1
ATS	0	0.91		
	300	0.66		1
	400	0.54		
	600	0.23	1	
month_with_Visa	0	0.48		1
	6	0.18	1	
upscale	0	1.23		
	1	0.98		1
	2	0.87		
	3	0.76		
	4	0.65		
	5	0.43	1	
relationship	0	0.21		1
share	0	0.55		
	1	0.33	1	1
		Linear Score	-3.83	-2.34
		Probability	0.02	0.09
		Default Score	776	668

FIG. 7

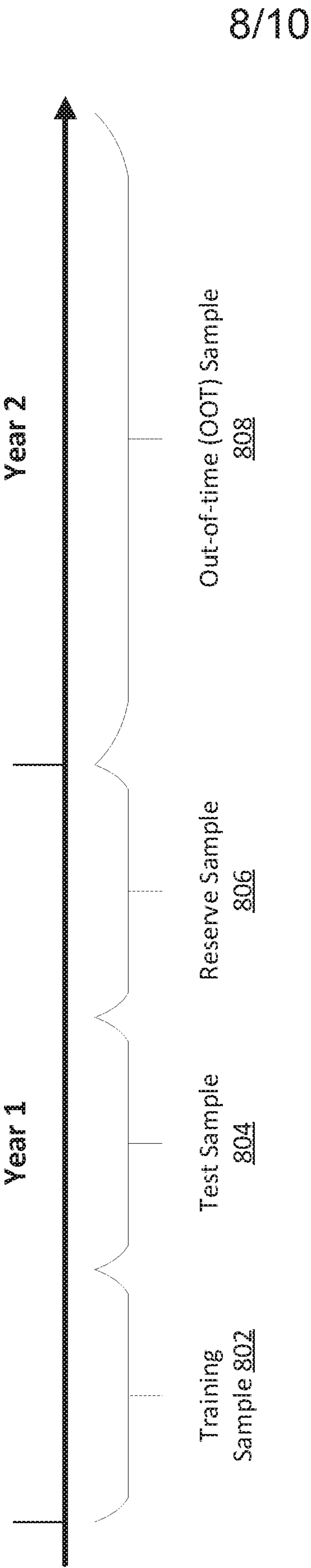


FIG. 8

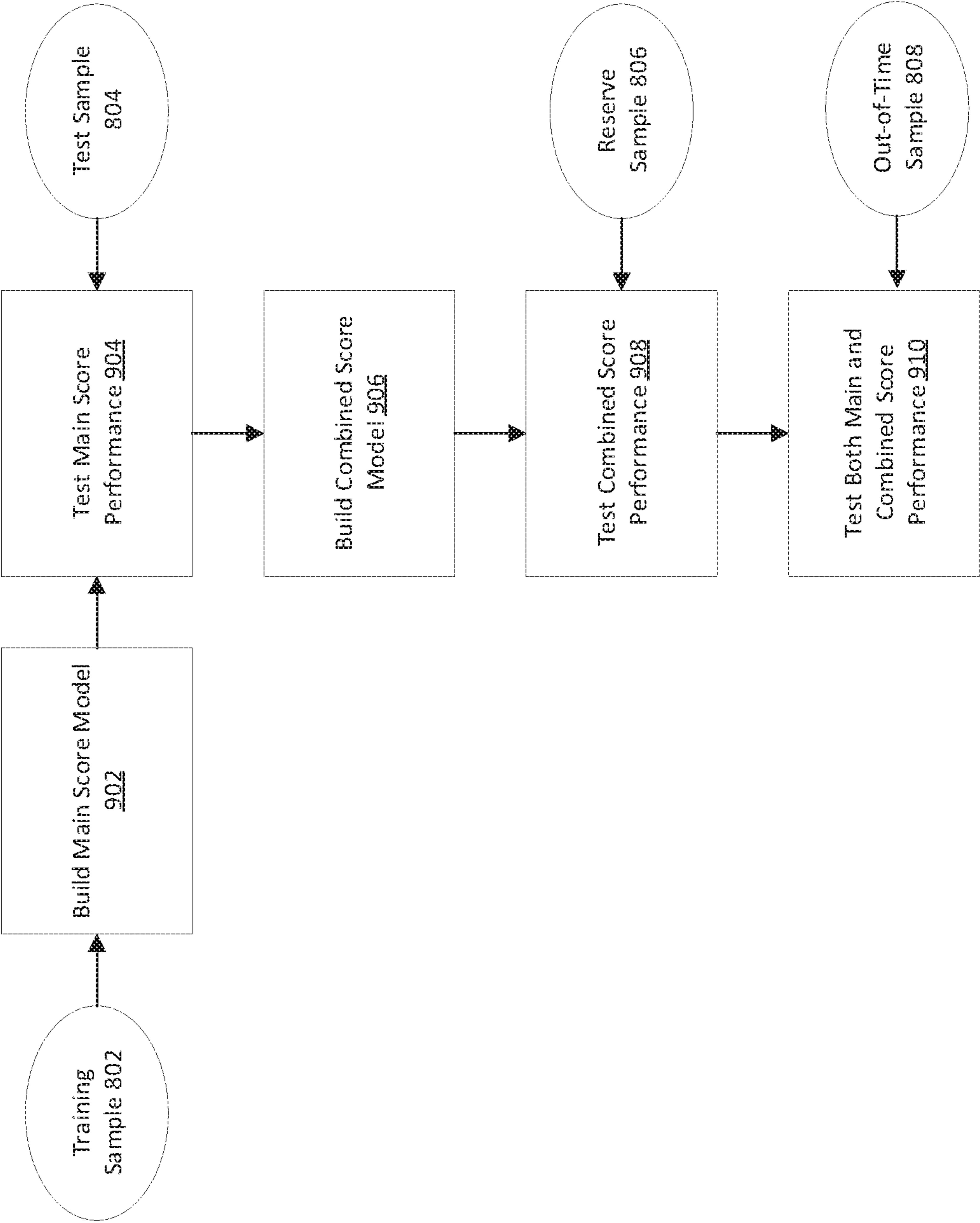


FIG. 9

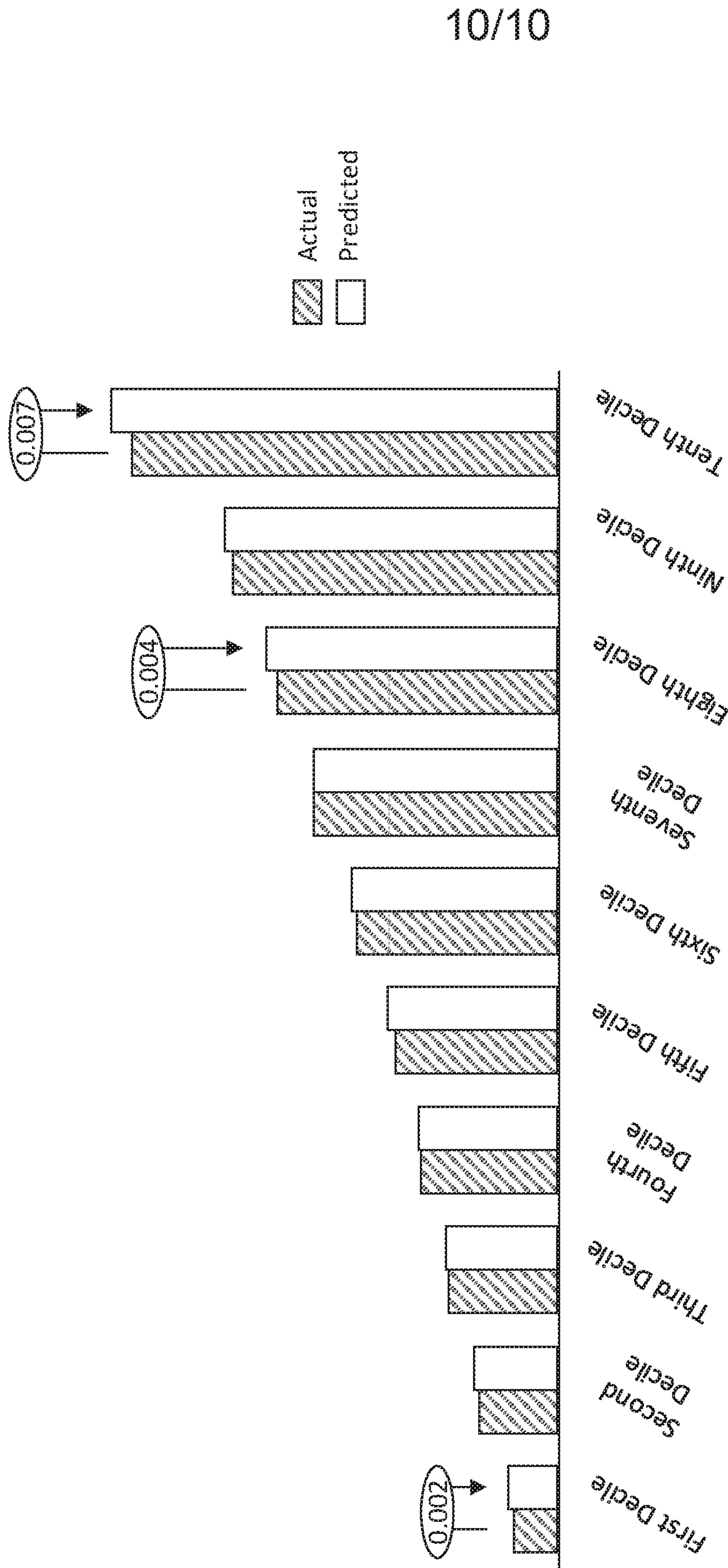


FIG. 10