

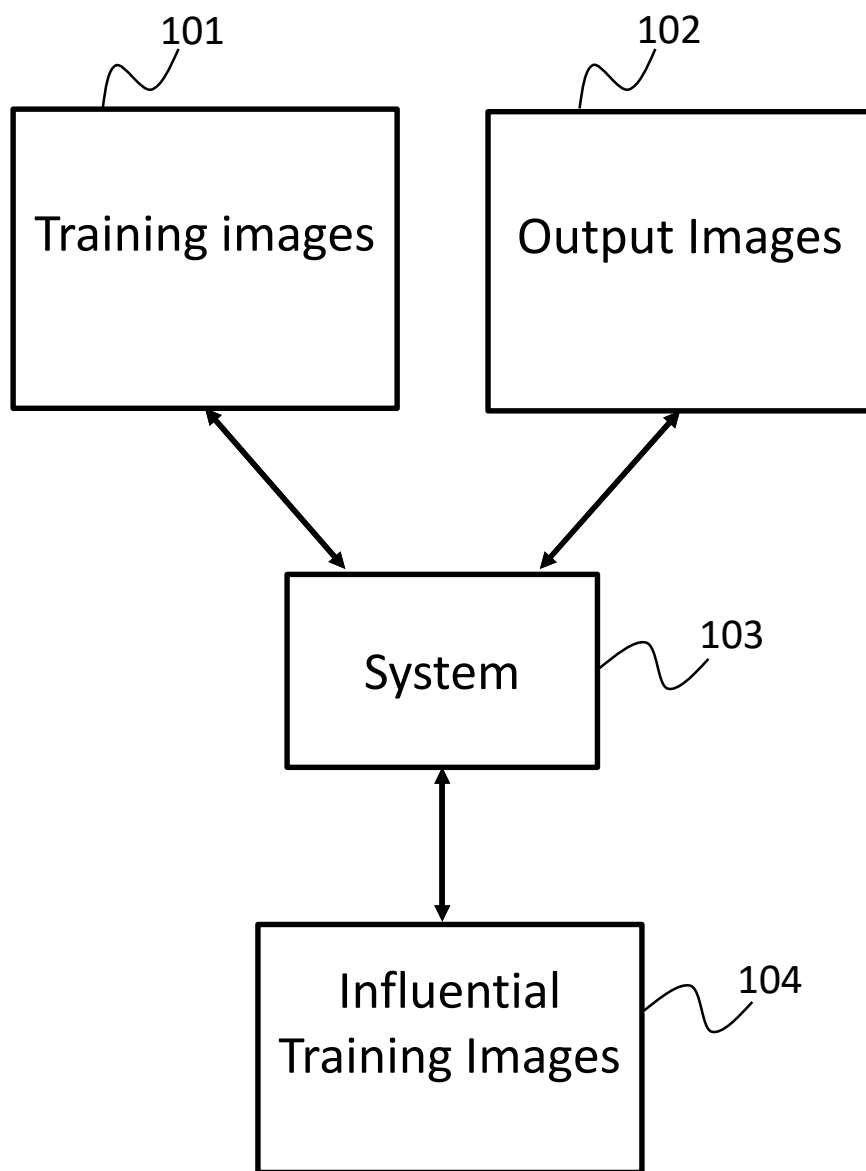


FIG. 1

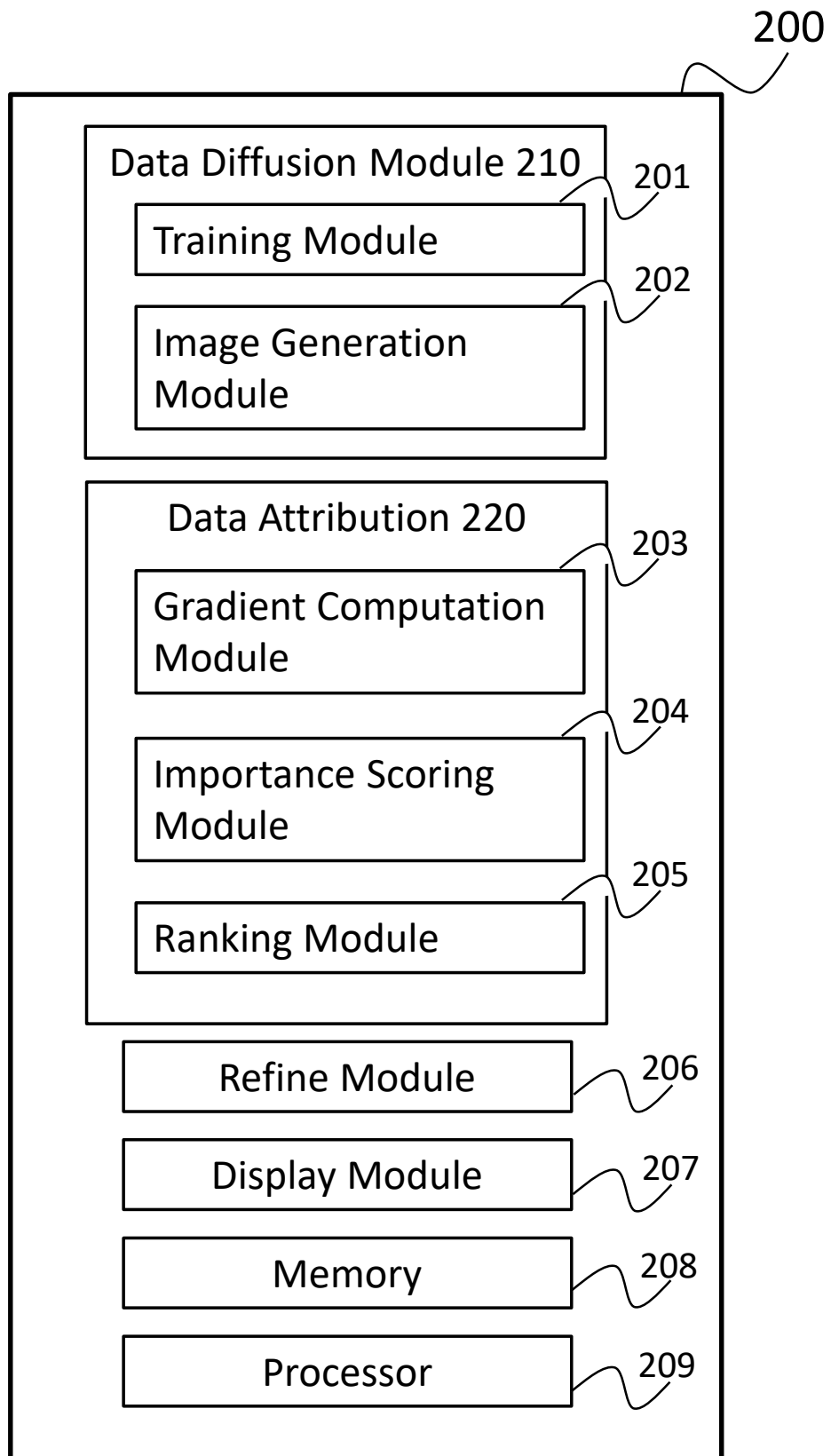


FIG. 2

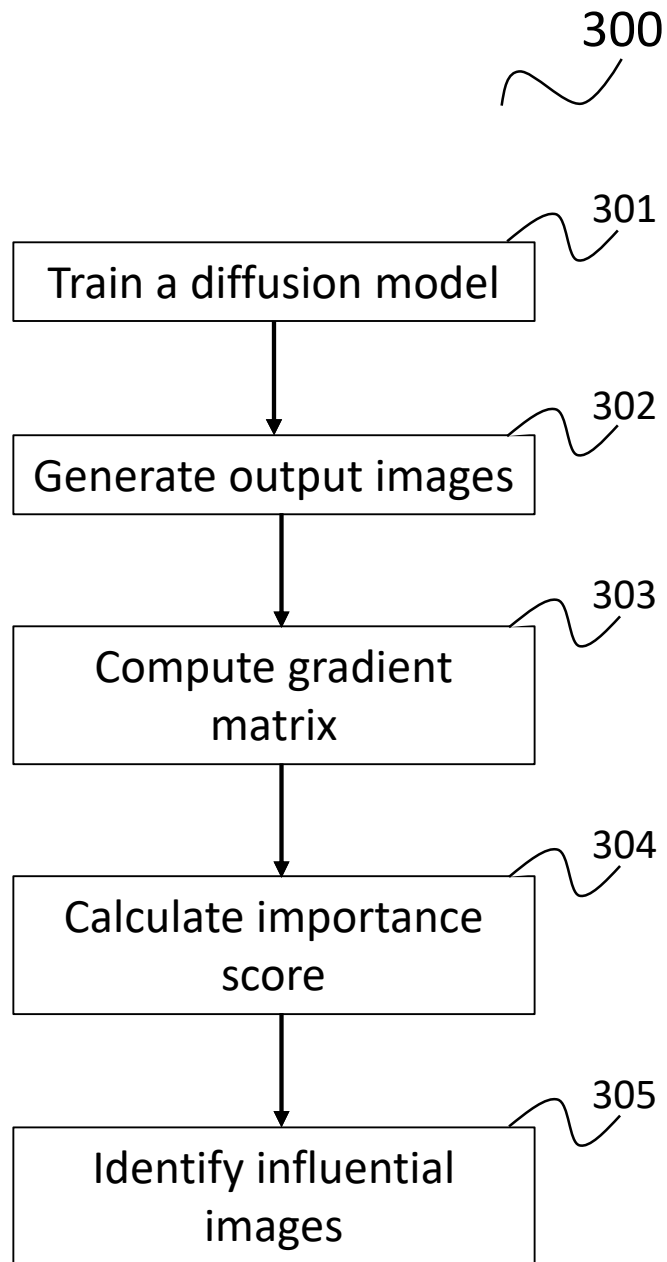


FIG. 3

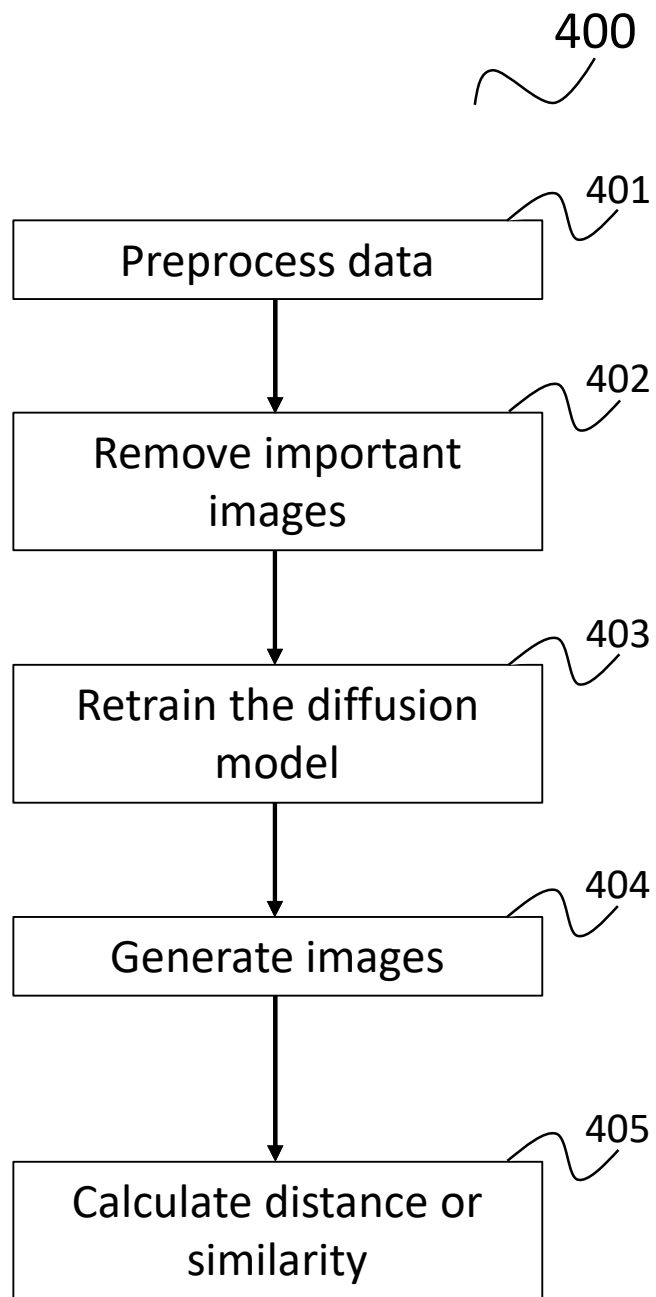


FIG. 4

Method	Construction of $\phi^s(\mathbf{x})$	Validation			Generation		
		10	100	1000	10	100	1000
TRAK	$\mathcal{P}_s^\top \nabla_\theta \mathcal{L}_{\text{Simple}}(\mathbf{x}, \theta_s^*)$	10.66	19.50	22.42	5.14	12.05	15.46
D-TRAK	$\mathcal{P}_s^\top \nabla_\theta \mathcal{L}_{\text{ELBO}}(\mathbf{x}, \theta_s^*)$	8.46	9.07	13.19	3.49	3.83	5.80
	$\mathcal{P}_s^\top \nabla_\theta \mathcal{L}_{\text{Square}}(\mathbf{x}, \theta_s^*)$	24.78	30.81	32.37	16.20	22.62	23.94
	$\mathcal{P}_s^\top \nabla_\theta \mathcal{L}_{\text{Avg}}(\mathbf{x}, \theta_s^*)$	24.91	29.15	30.39	16.76	20.82	21.48
	$\mathcal{P}_s^\top \nabla_\theta \mathcal{L}_{1\text{-norm}}(\mathbf{x}, \theta_s^*)$	23.44	30.36	32.29	15.10	21.99	23.78
	$\mathcal{P}_s^\top \nabla_\theta \mathcal{L}_{2\text{-norm}}(\mathbf{x}, \theta_s^*)$	24.72	30.91	32.35	15.75	22.44	23.82
	$\mathcal{P}_s^\top \nabla_\theta \mathcal{L}_{\infty\text{-norm}}(\mathbf{x}, \theta_s^*)$	5.22	11.54	22.25	3.99	8.11	15.94

FIG. 5a

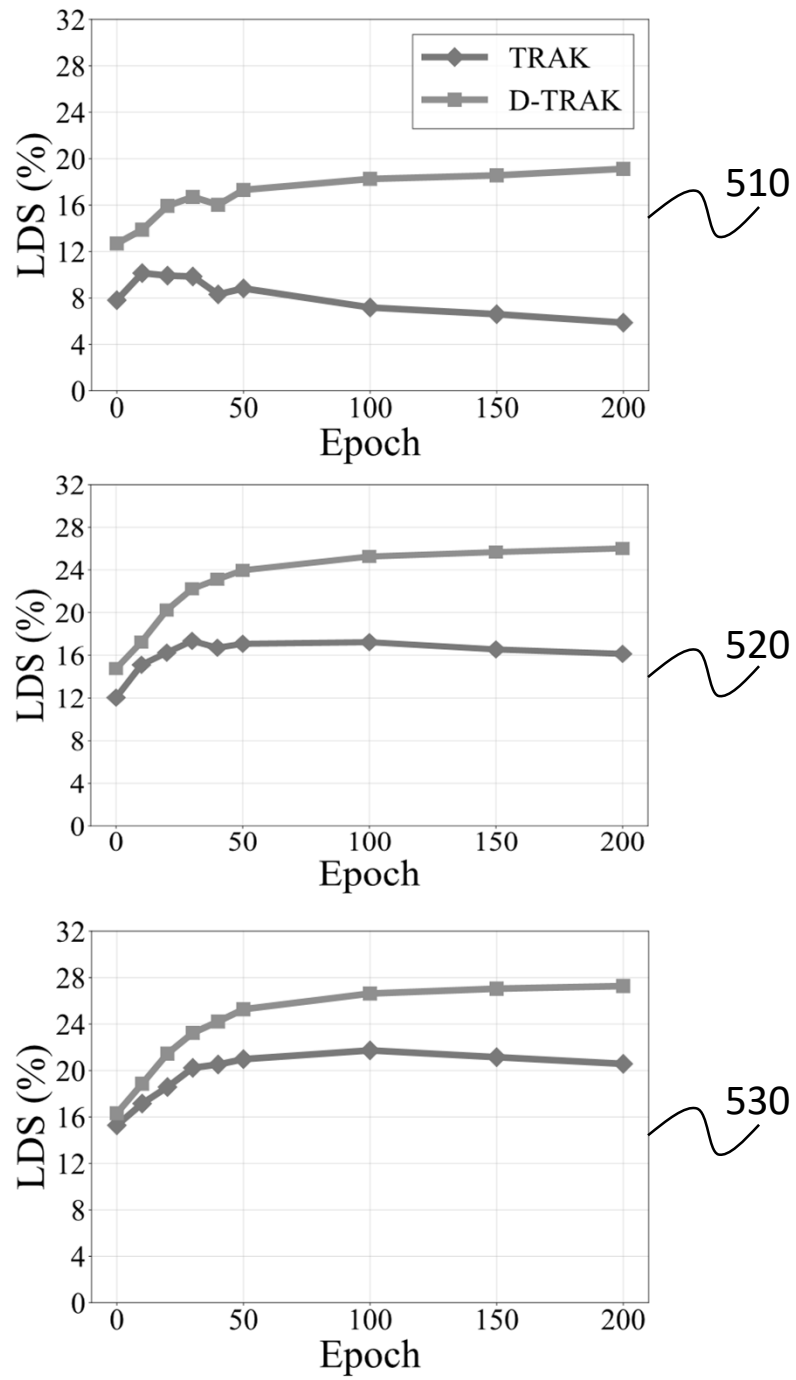
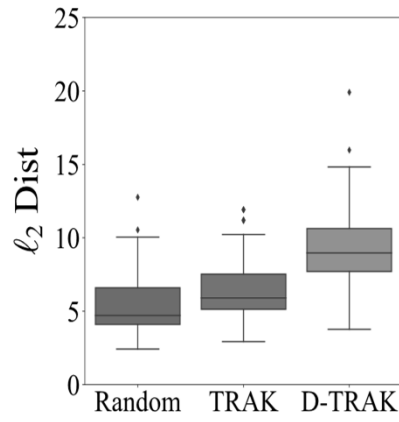
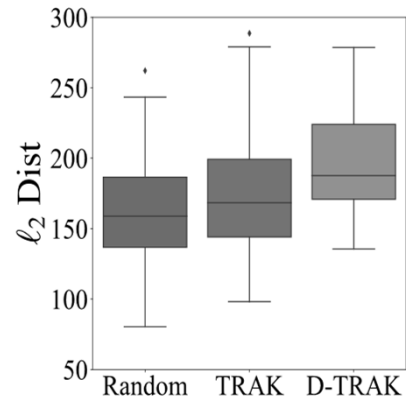


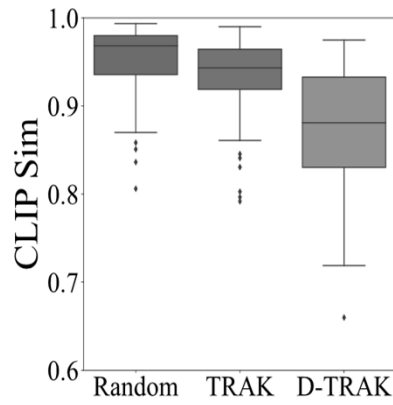
FIG. 5b



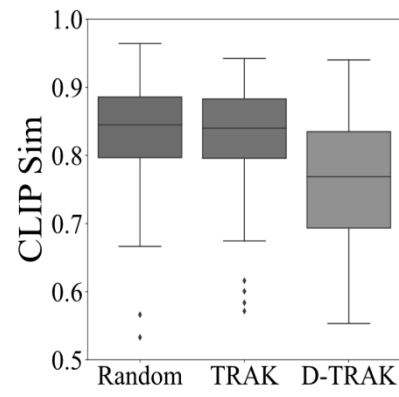
6a. CIFAR-2



6b. ArtBench-2



6c. CIFAR-2



6d. ArtBench-2

FIG. 6

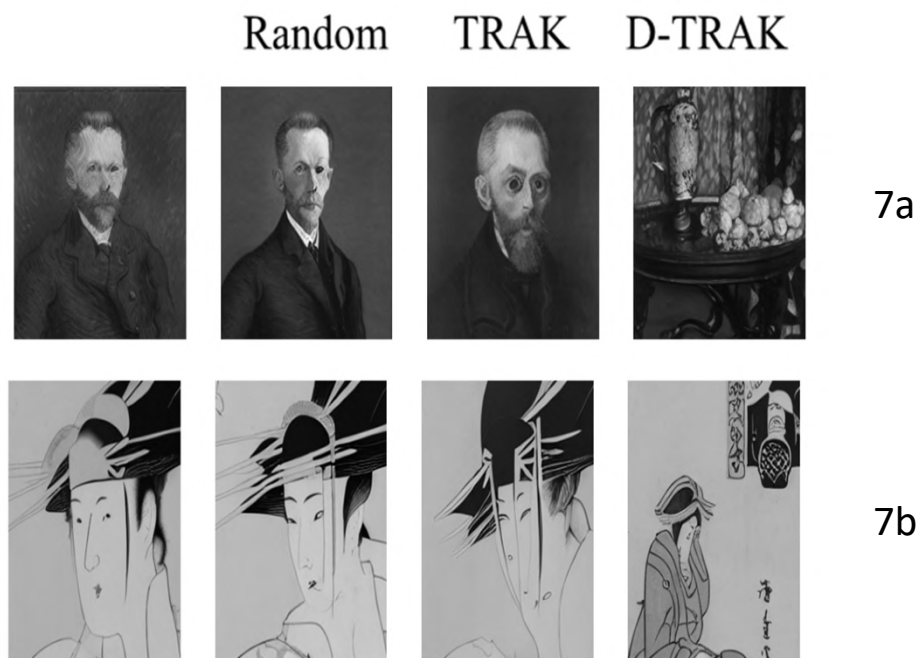


FIG. 7