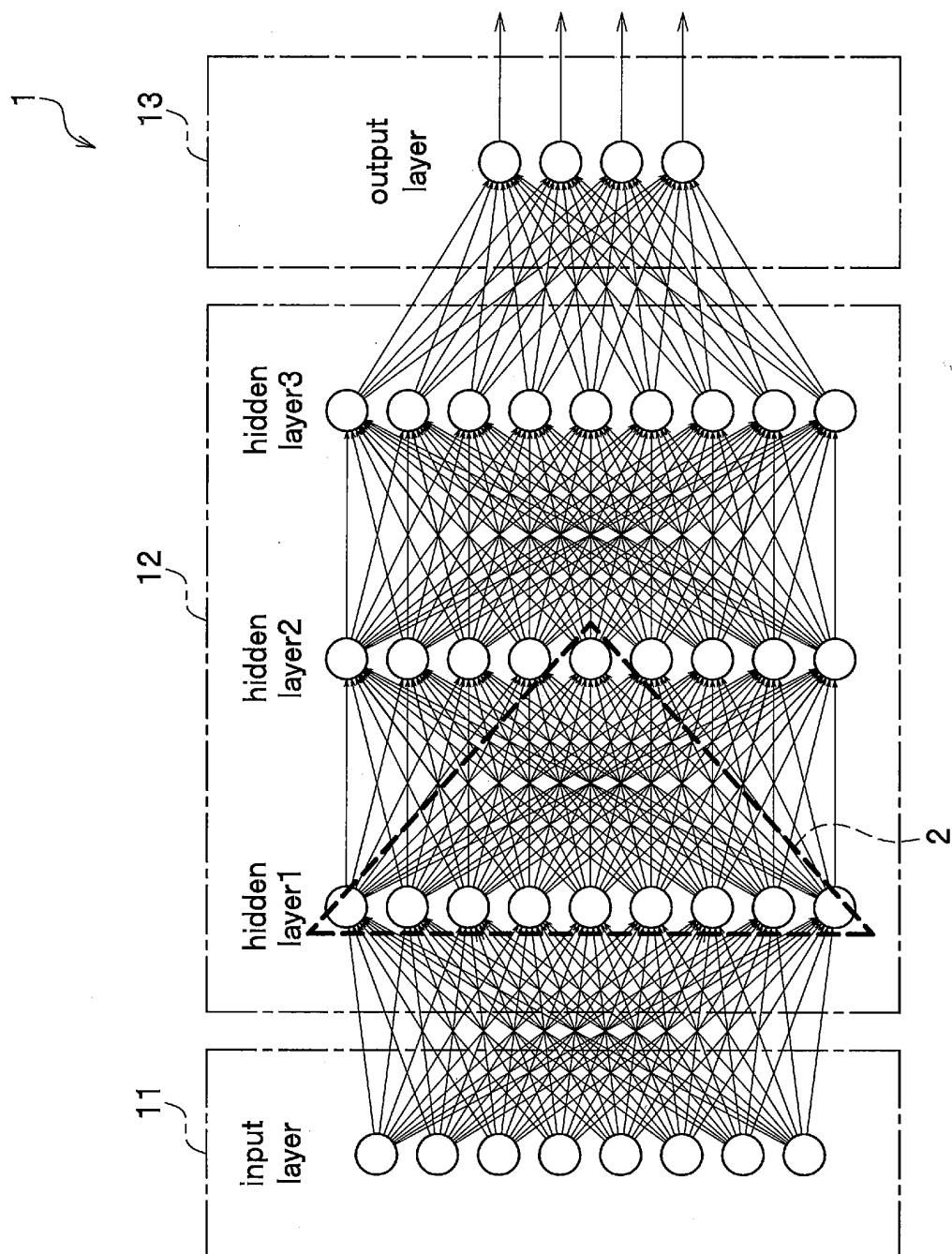
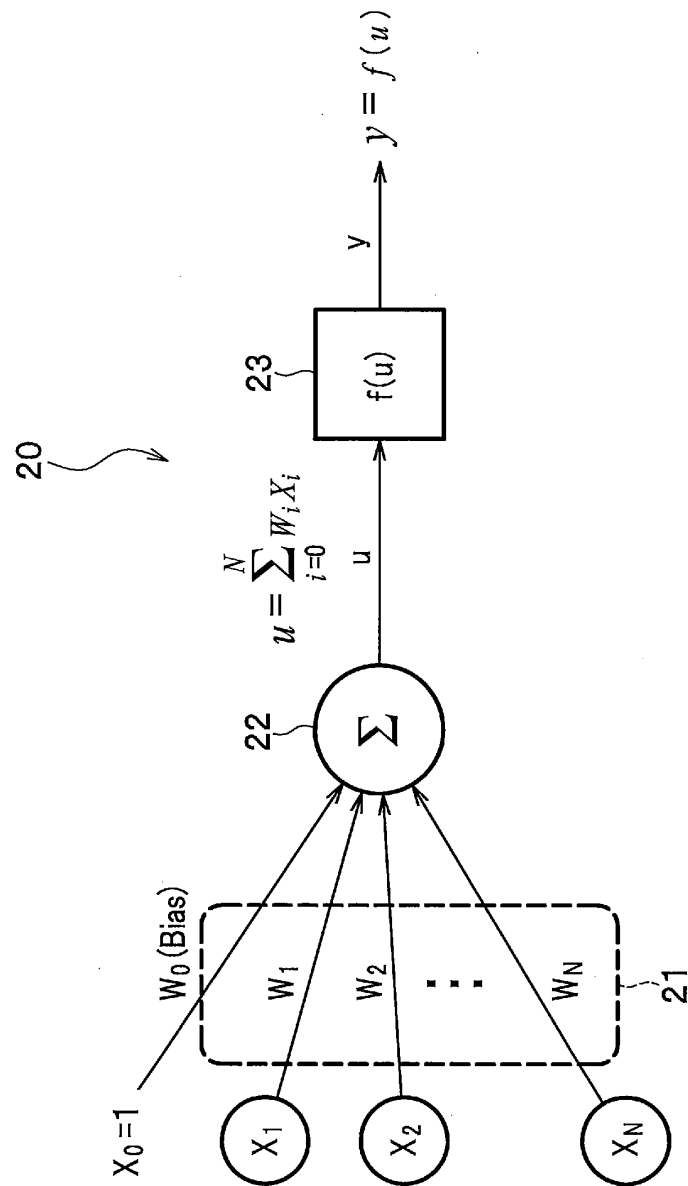


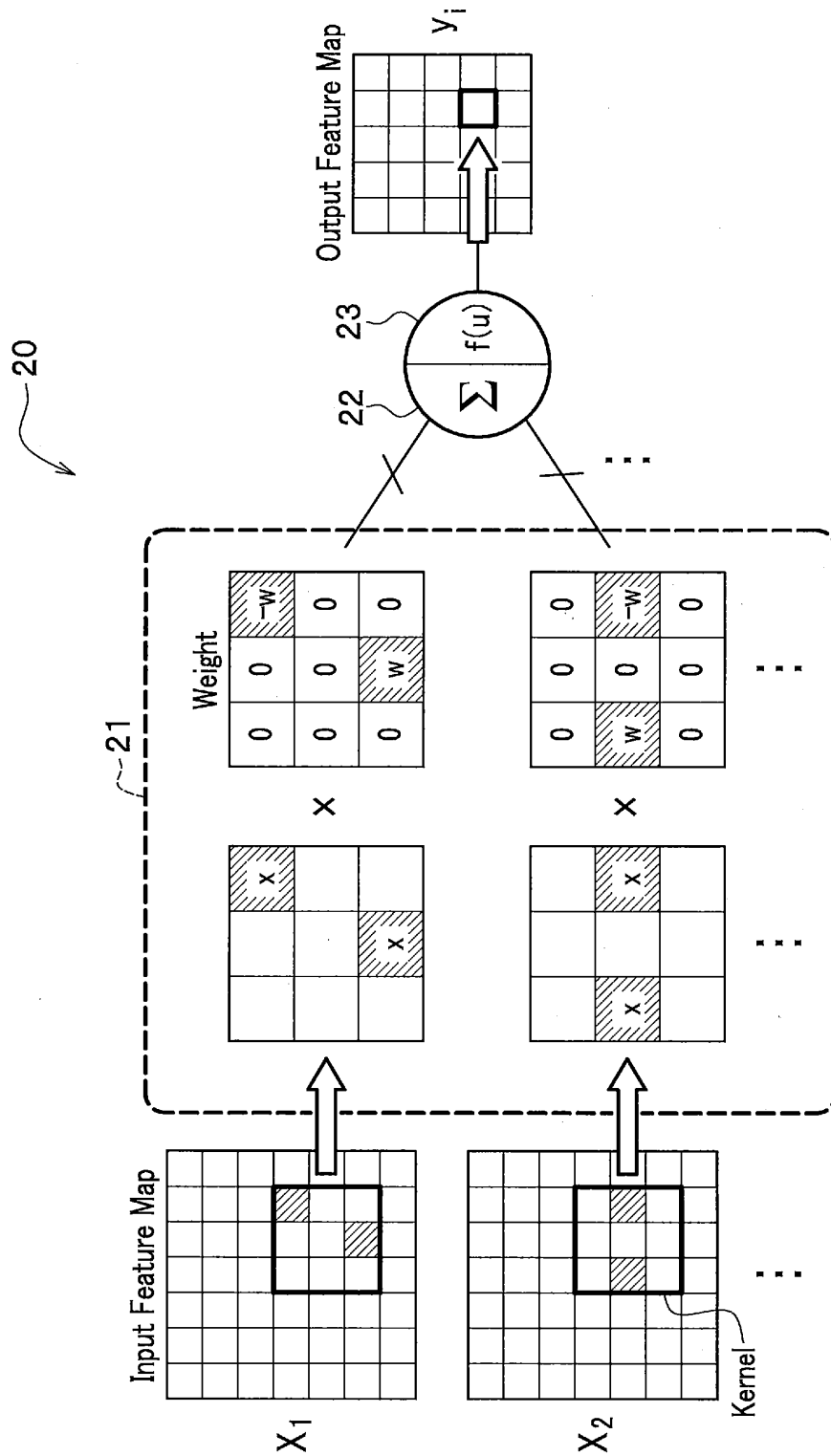
[図1]



[図2]

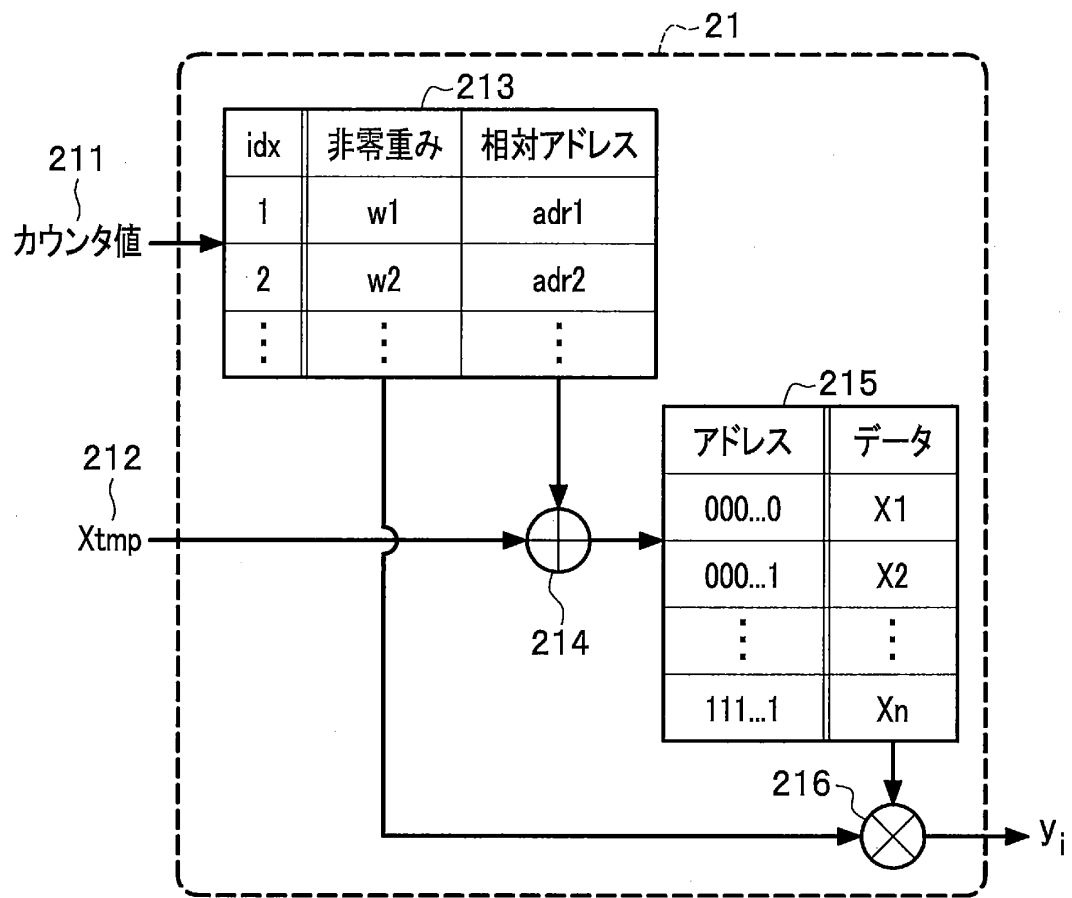


[図3]

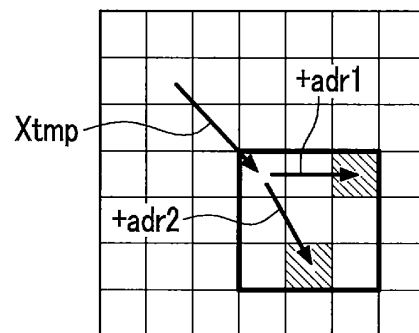


[図4]

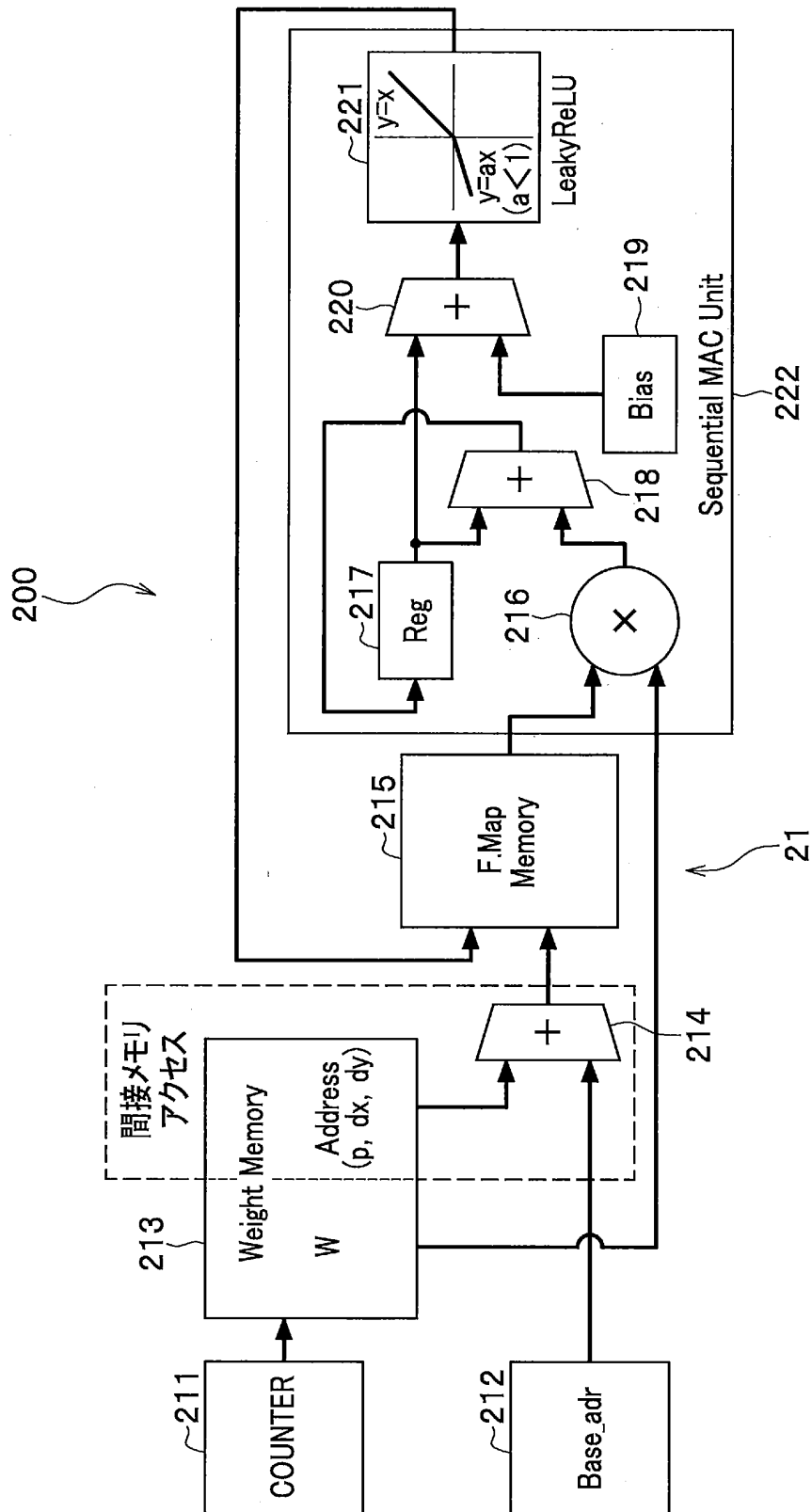
(a)



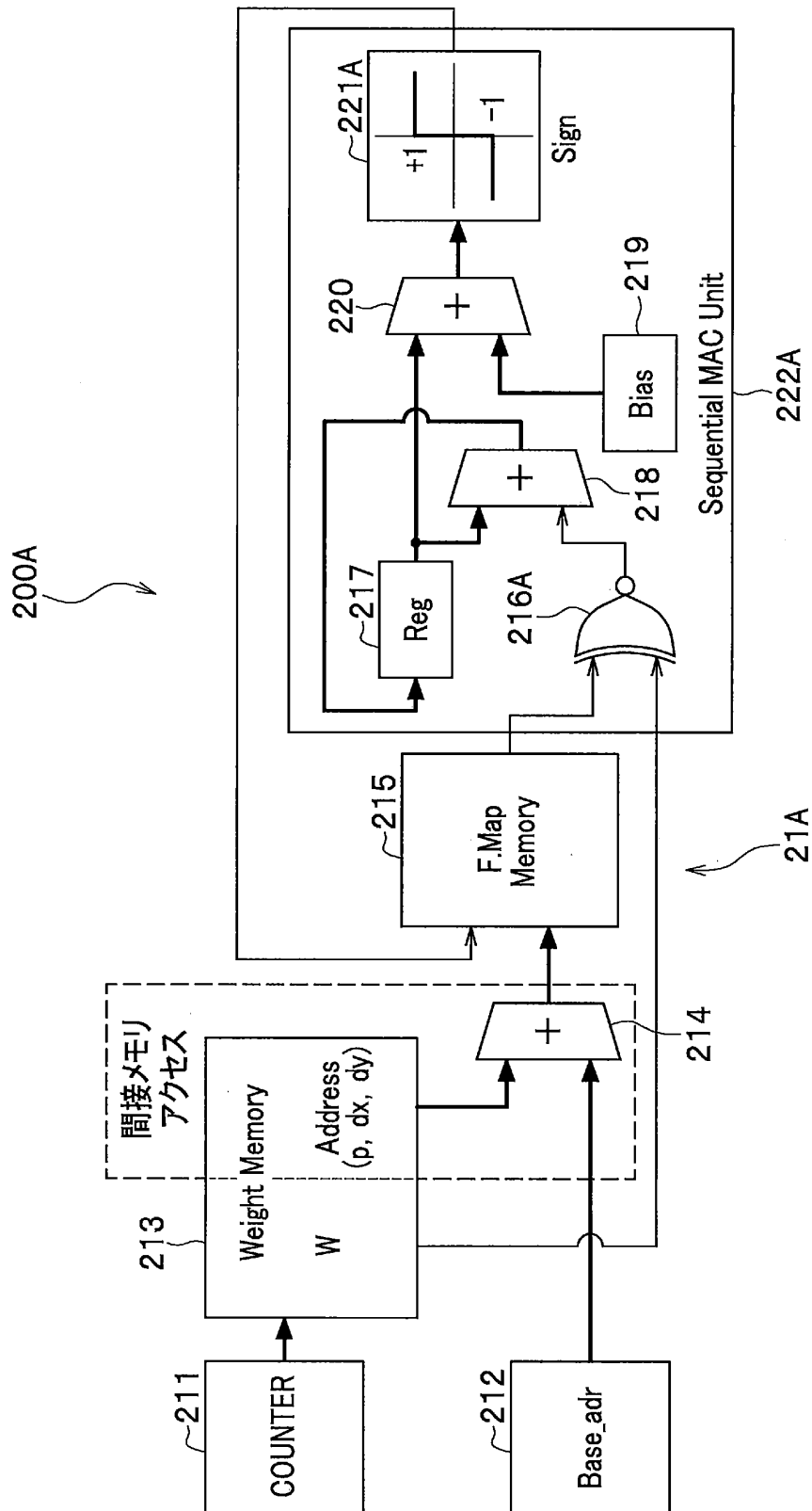
(b)



[図5]

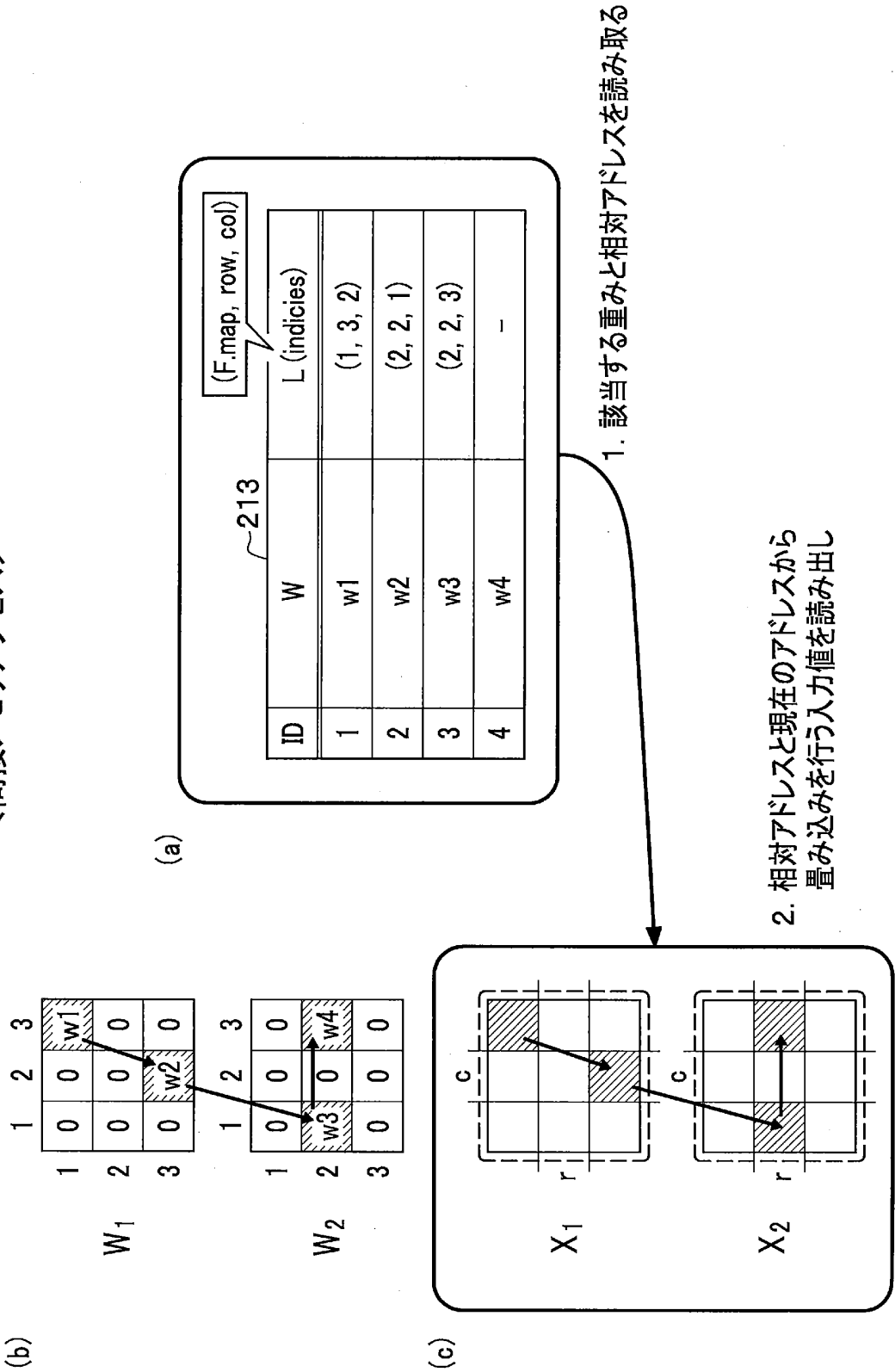


[図6]

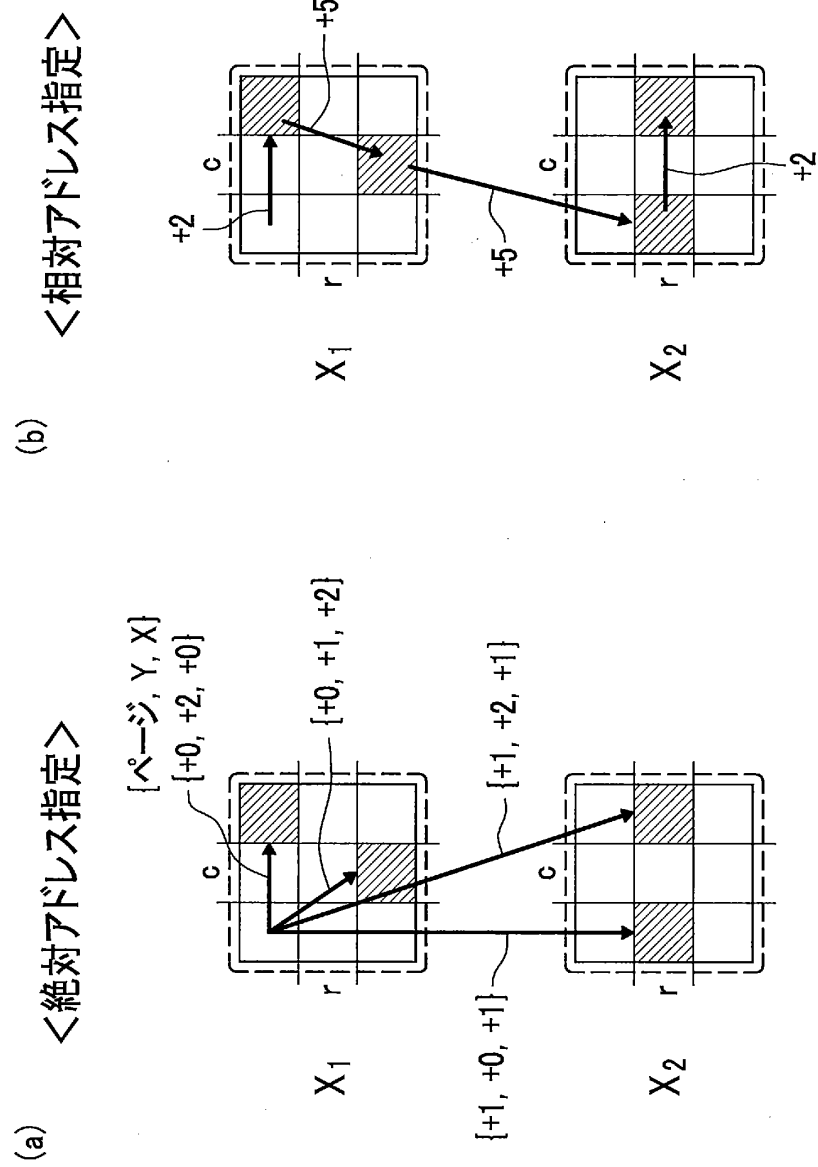


[図7]

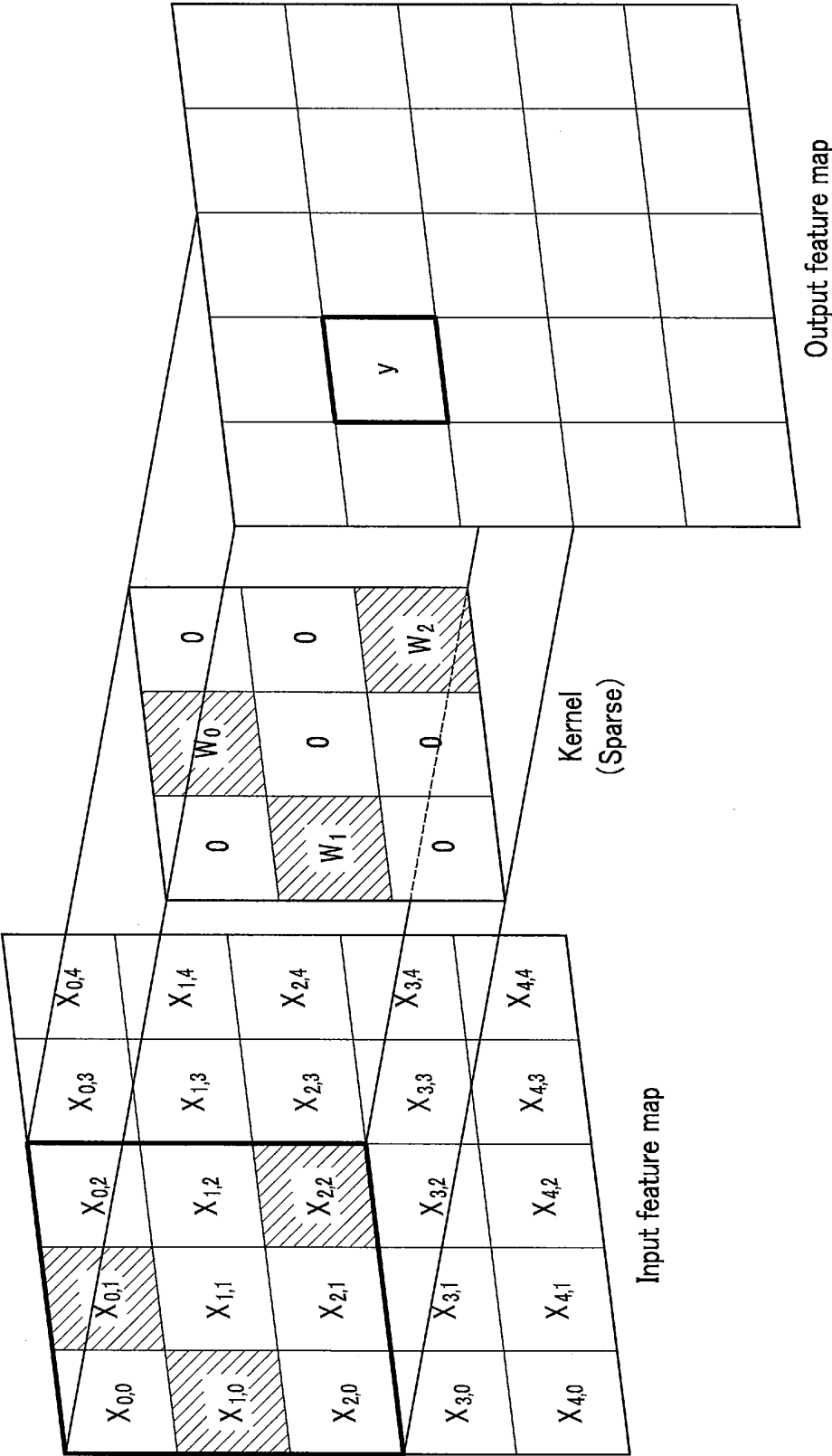
<間接メモリアクセス>



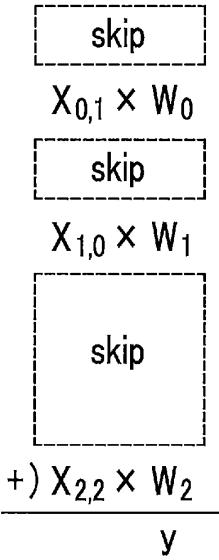
[図8]



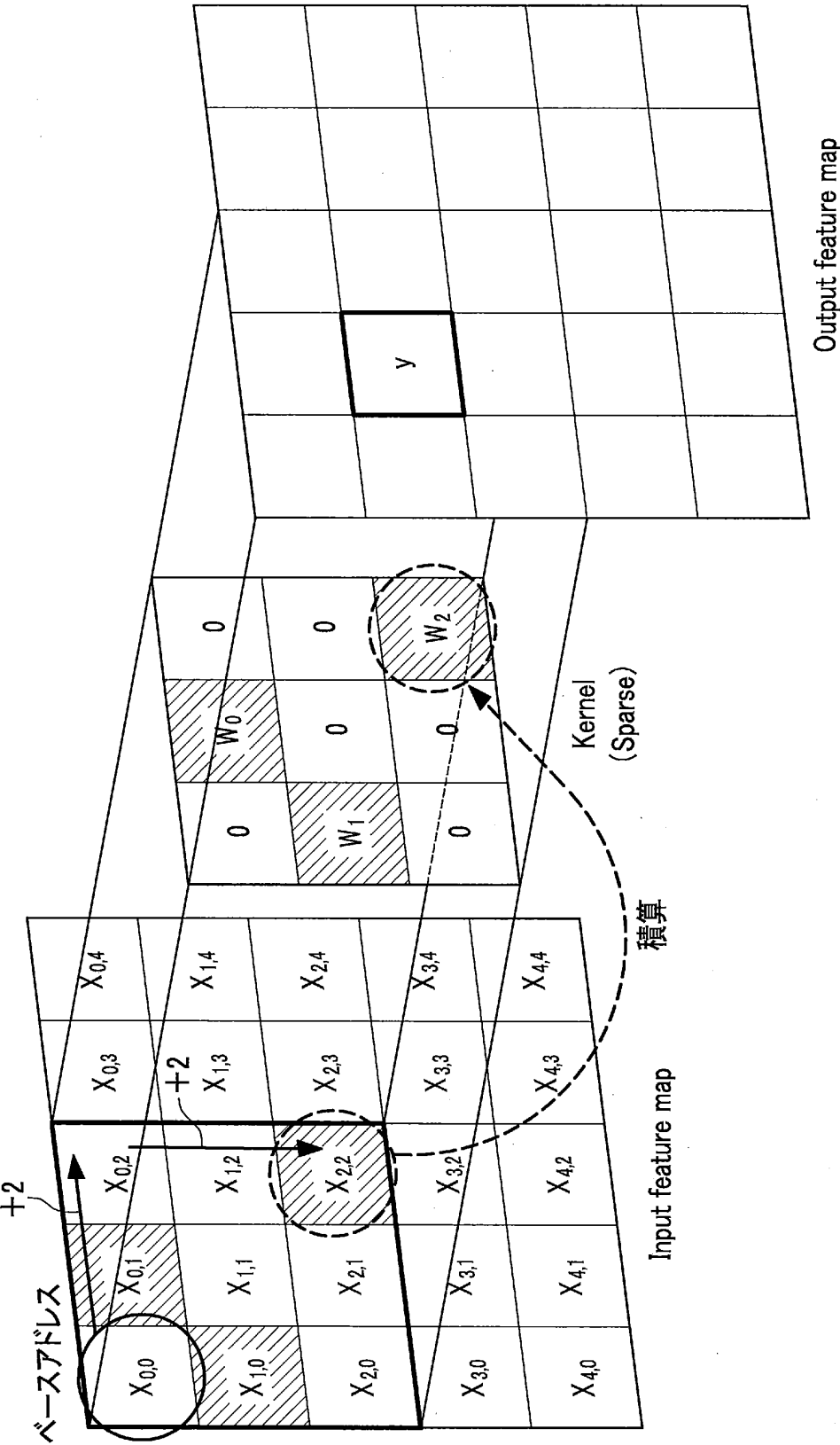
[図9]



[図10]

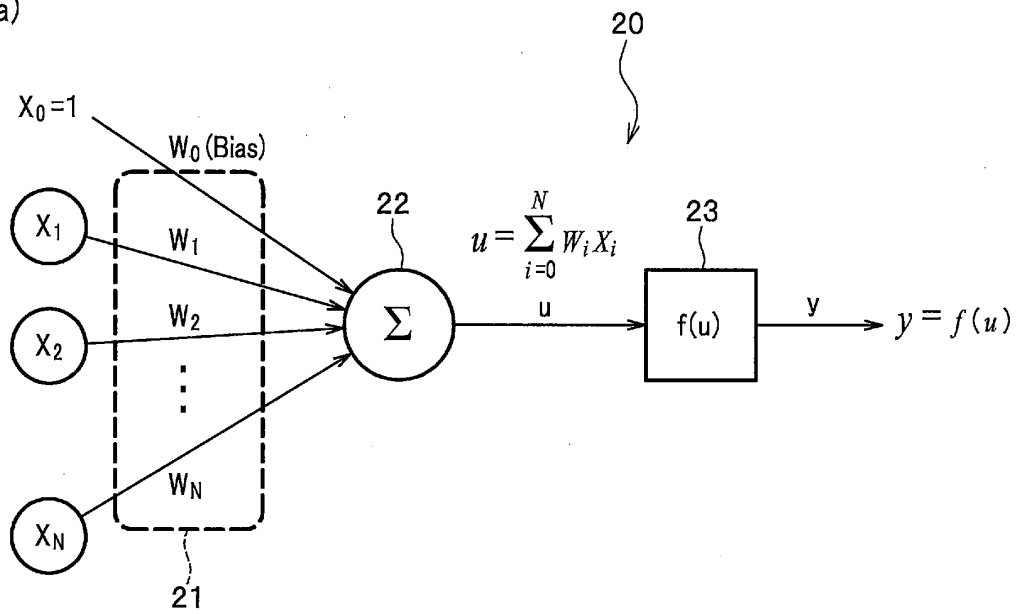


[図11]

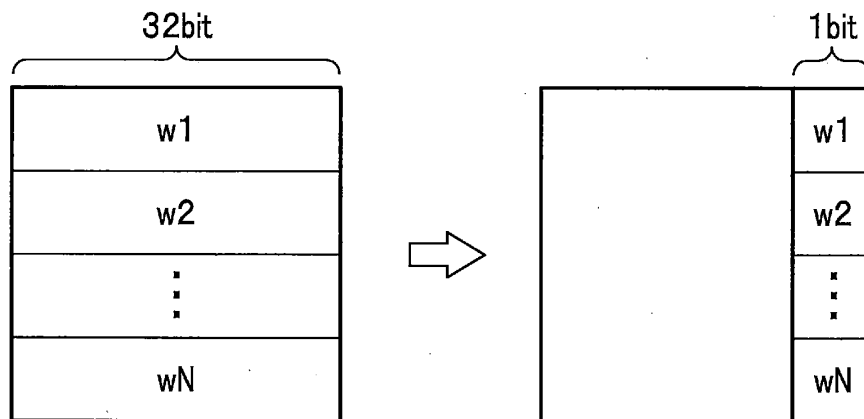


[図12]

(a)

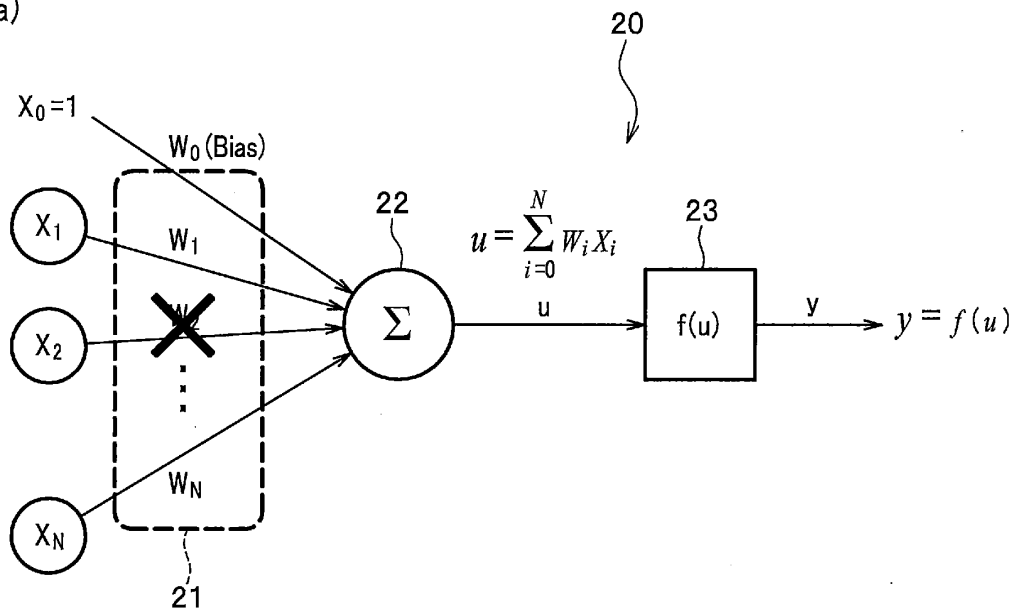


(b)

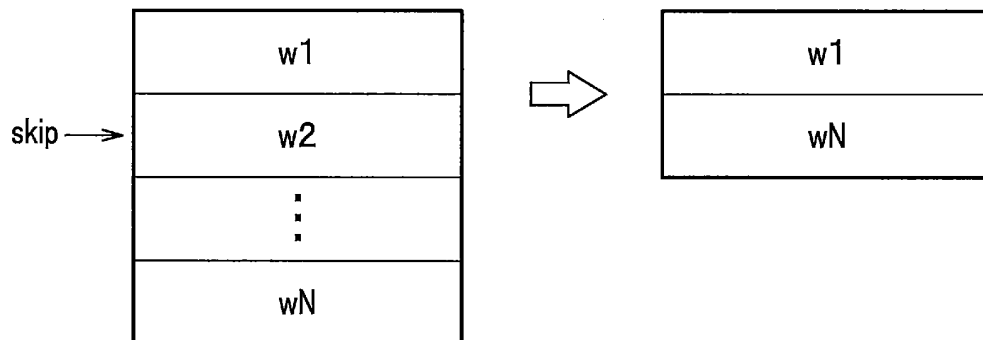


[図13]

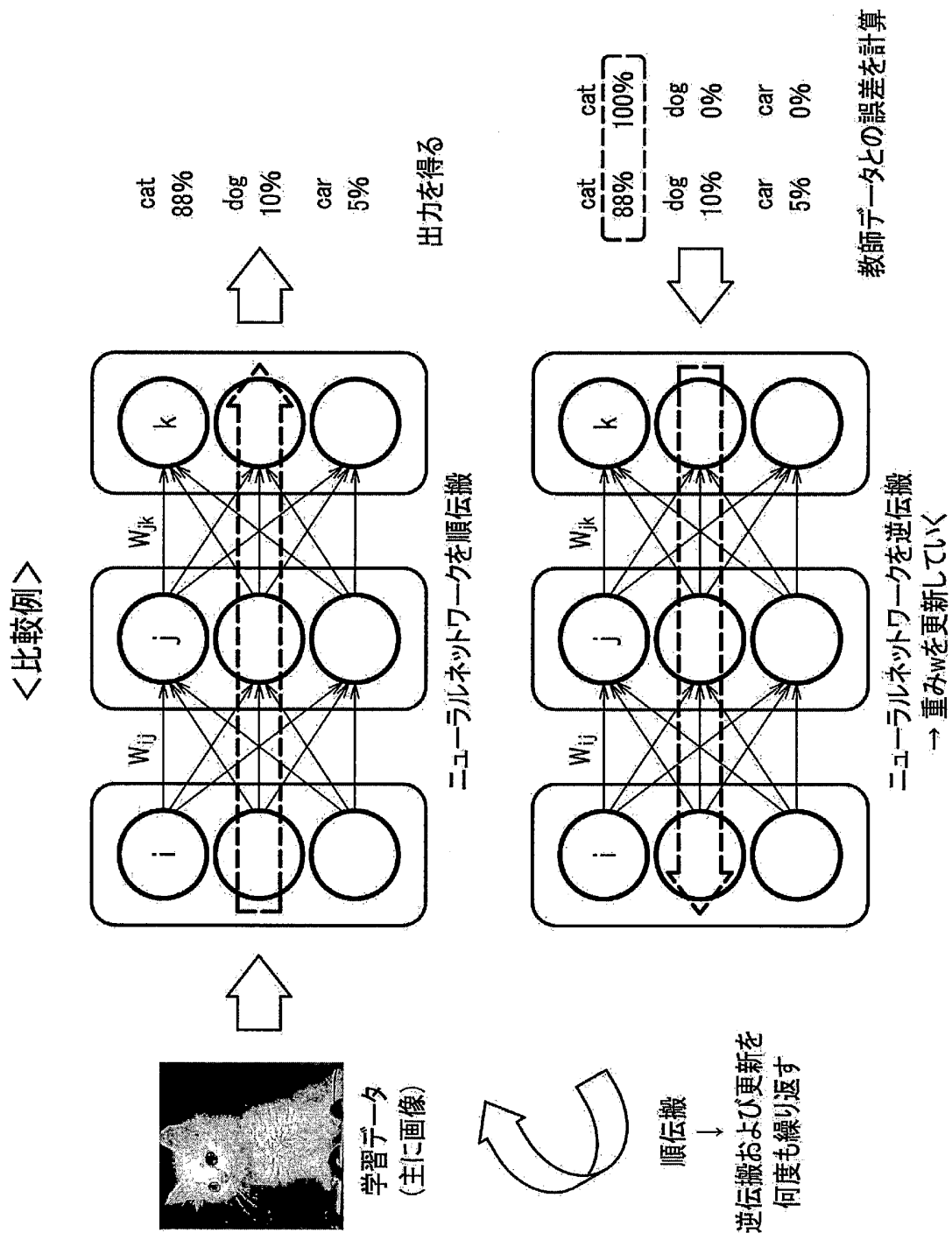
(a)



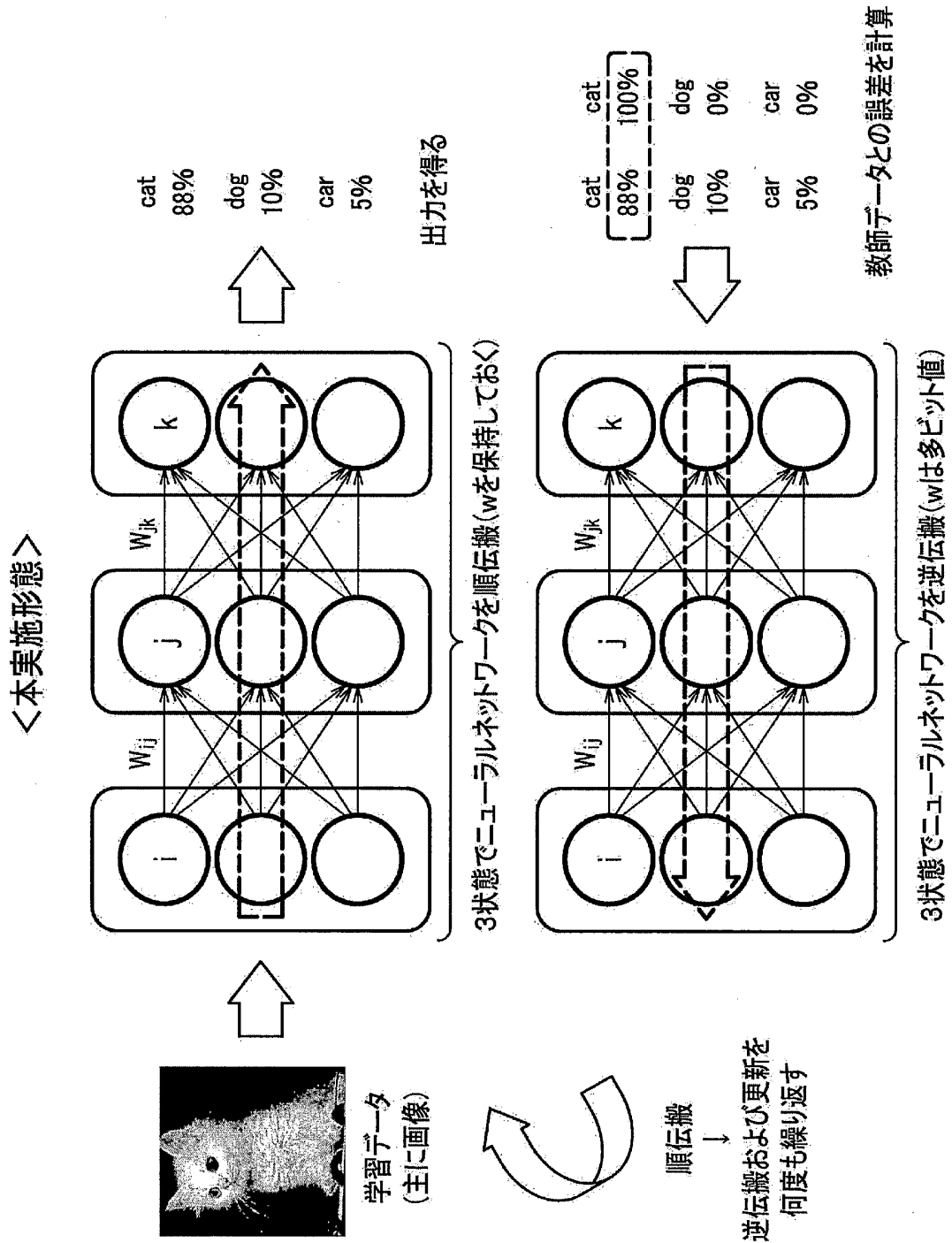
(b)



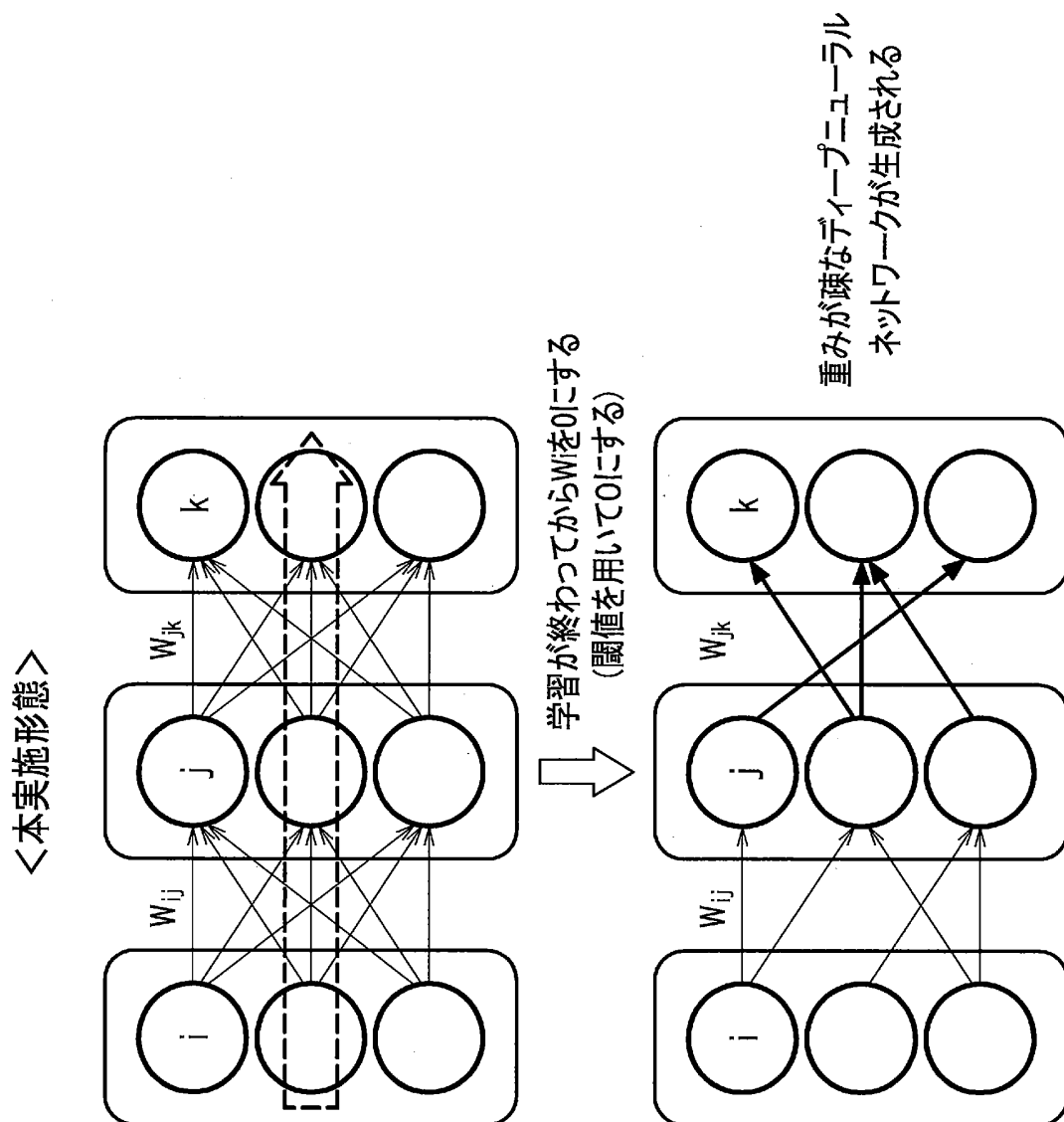
[図14]



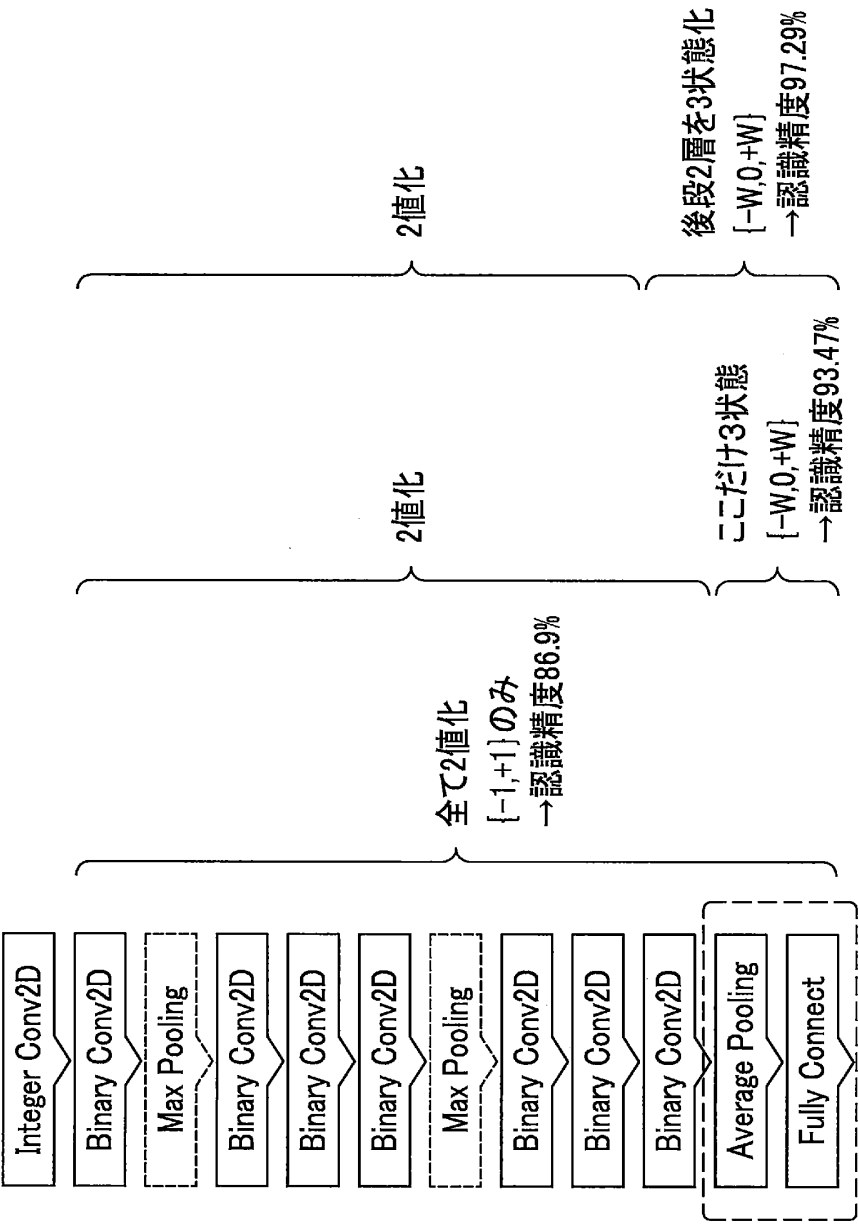
[図15]



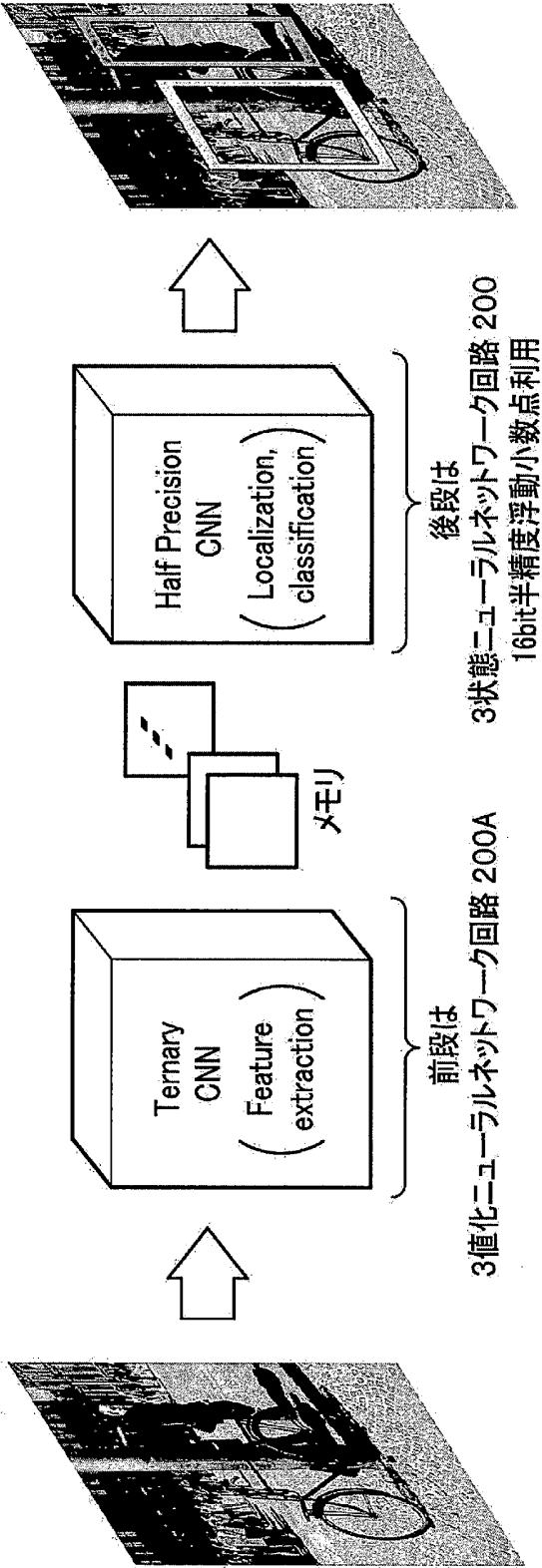
[図16]



[図17]



[図18]



[図19]

Platform	mCPU	mGPU	FPGA	本実施形態
Device	Quad-core ARM Cortex-A57	256-core Pascal GPU	Zynq Ultra MPSoC	Zynq Ultra MPSoC
Clock Freq	1.9GHz	1.3GHz	0.1GHz	0.15GHz
Memory	32GB eMMC Flash	8GB LPDDR4	32.1Mb BRAM	7.41Mb BRAM
Time [msec] (FPS)[sec ⁻¹]	4210.0 (0.23)	715.9 (1.48)	27.3 (36.50)	18.9 (52.65)
電力[W]	4.0	7.0	3.5	2.1
効率[FPS/W]	0.057	0.211	10.42	25.07

[図20]

