

Registration No.	Number 00066		
Registration Date	October 6, 2010	Registration Category	Category 2

Name (Model, etc.)	Fine pattern projection mask aligner FPA-141F
Location	Ota City, Tokyo Metropolis
	Canon Inc.
Owner (Custodian)	Canon Inc.
Manufacturer (Company)	Canon Inc.
Year Manufactured	1975
Reason For Selection	This device was used in the photolithography process in semiconductor manufacture, in which the pattern of the photo mask is projected to 1/4 of its size on the wafer. Using a reduced rather than an equal magnification projector lens enabled a higher resolution exposure of the patterns of the original plate. During that time, the word “stepper” was still not in use, but this device heralded the development of steppers, being the first in the world to make submicron exposures possible. A year before this device was invented, Intel introduced the 4 kbit DRAM; in terms of DRAM, this device’s resolution is equivalent to 256 kbit.
Registration Standard	1 - B

Open/Closed to Public	Closed to Public
Photo	
Other useful information	