

FIG. 1

1: PROGRAM ANALYSIS/VERIFICATION
SERVICE PROVISION SYSTEM

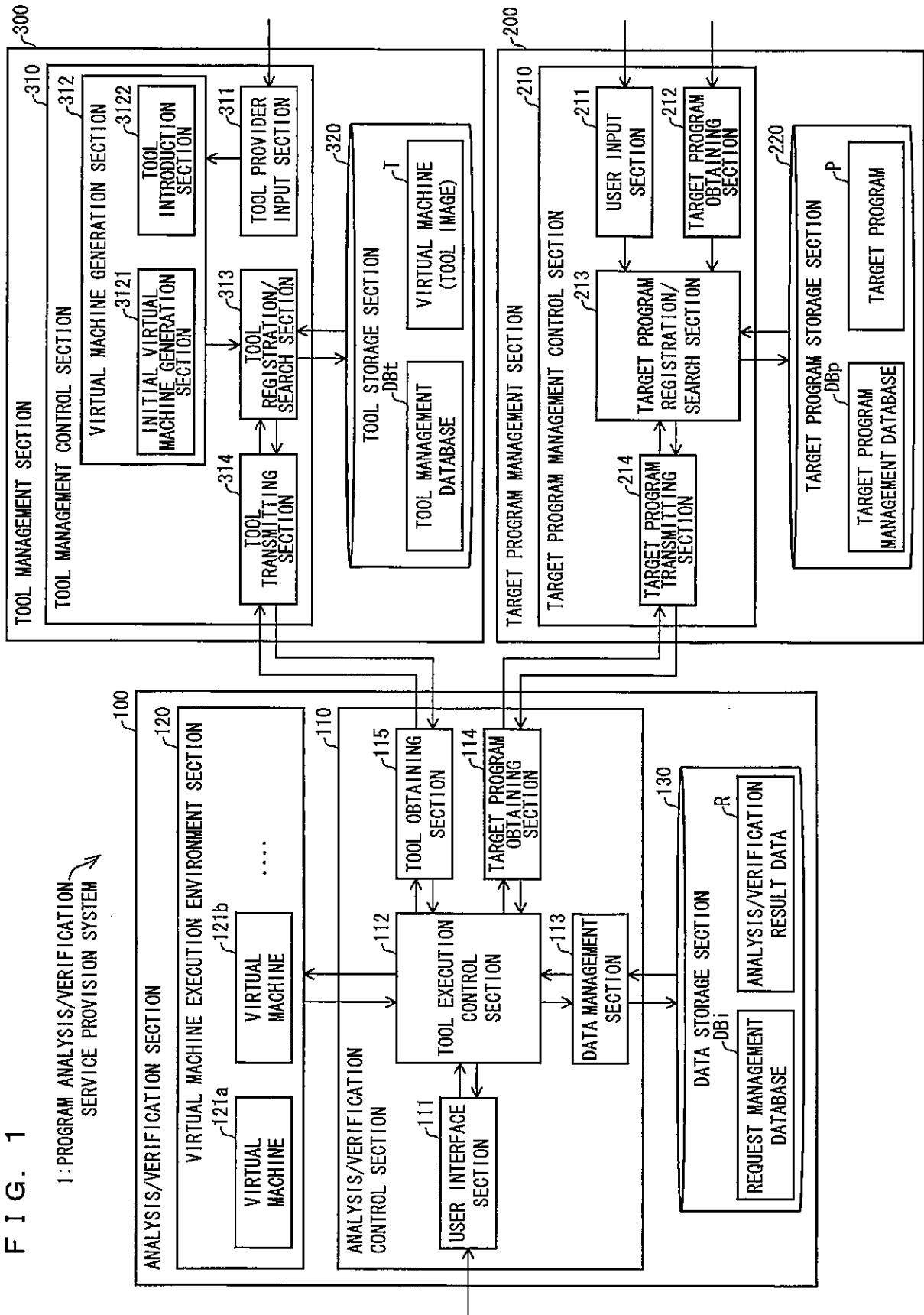


FIG. 2

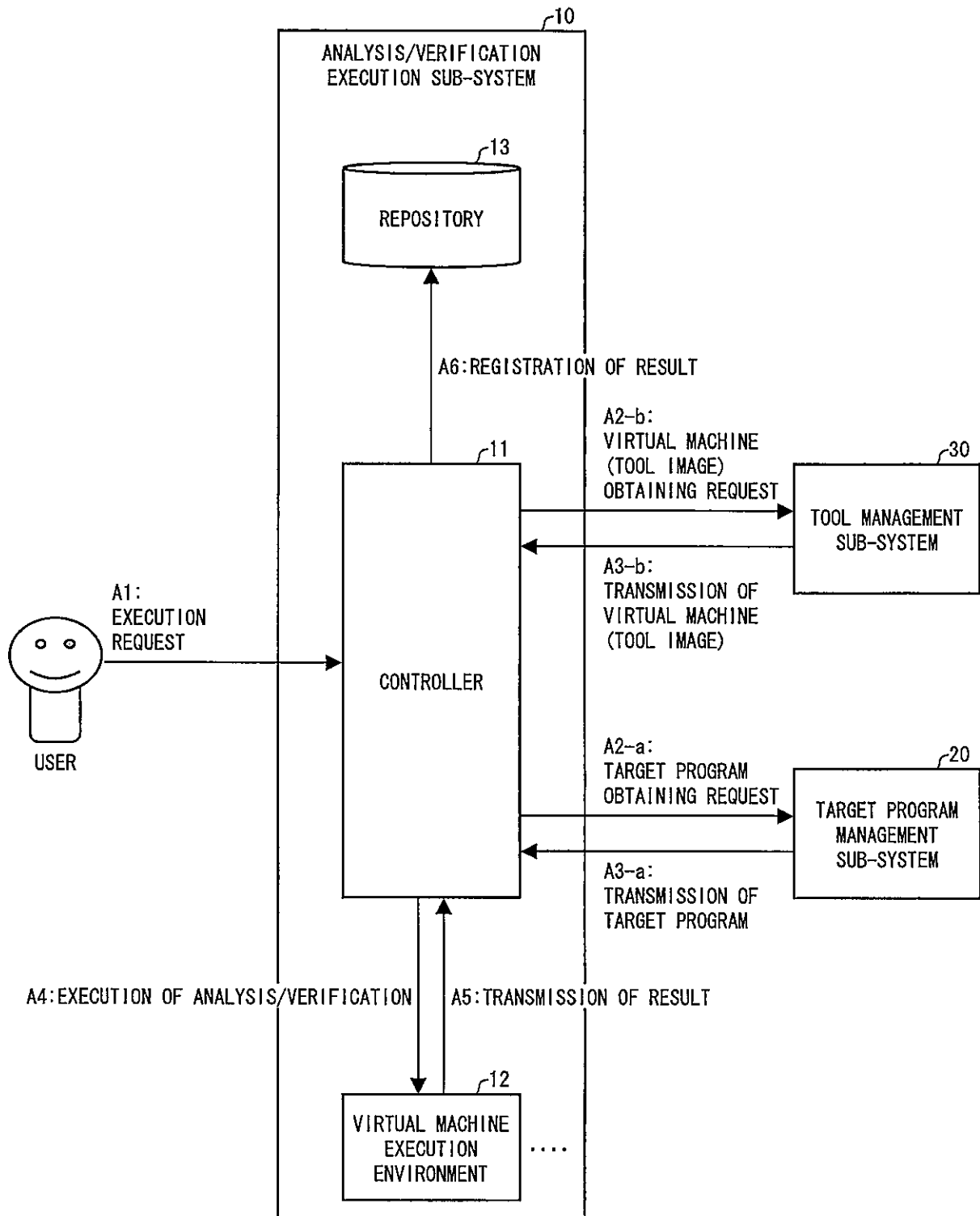


FIG. 3

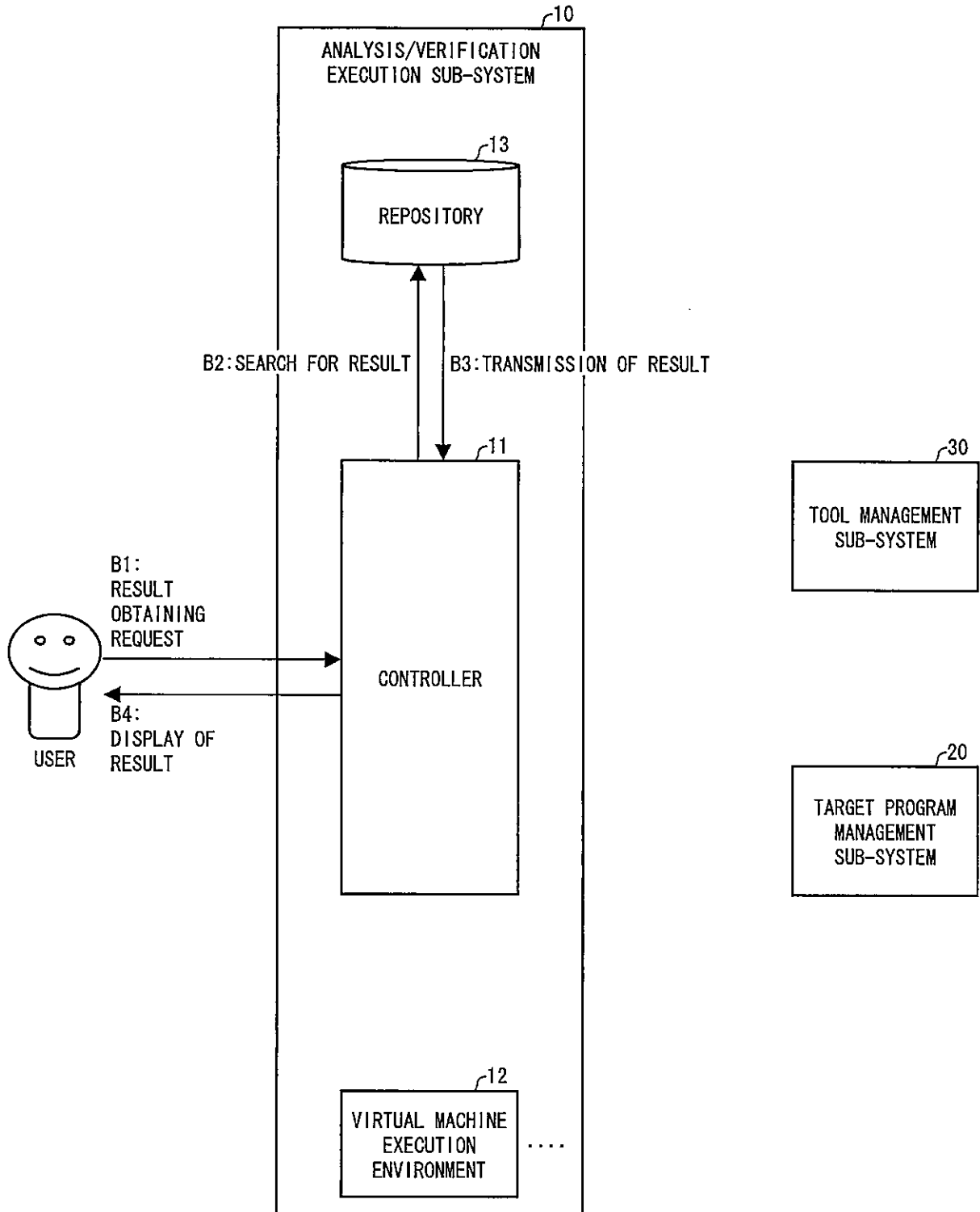


FIG. 4

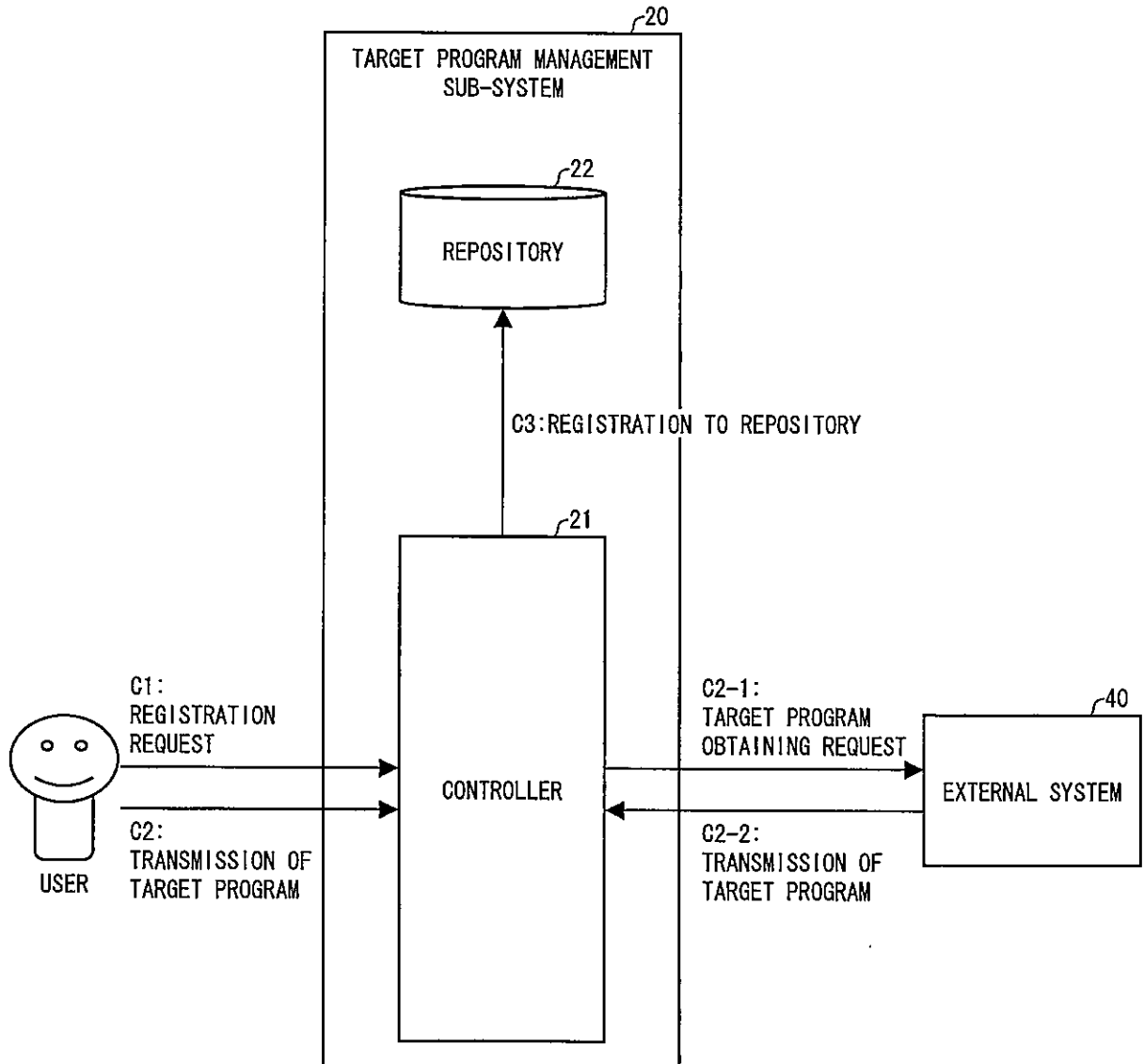


FIG. 5

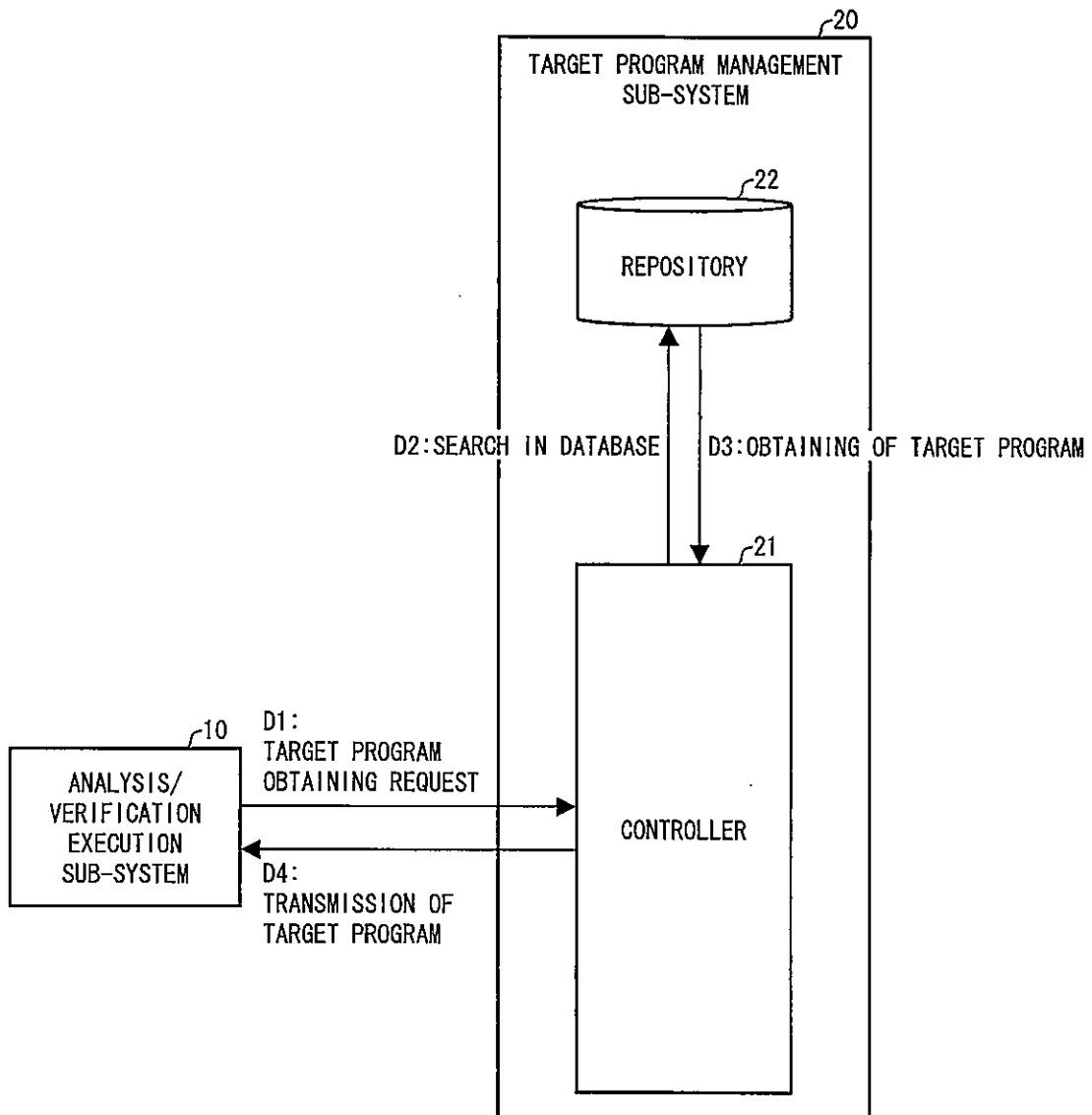


FIG. 6

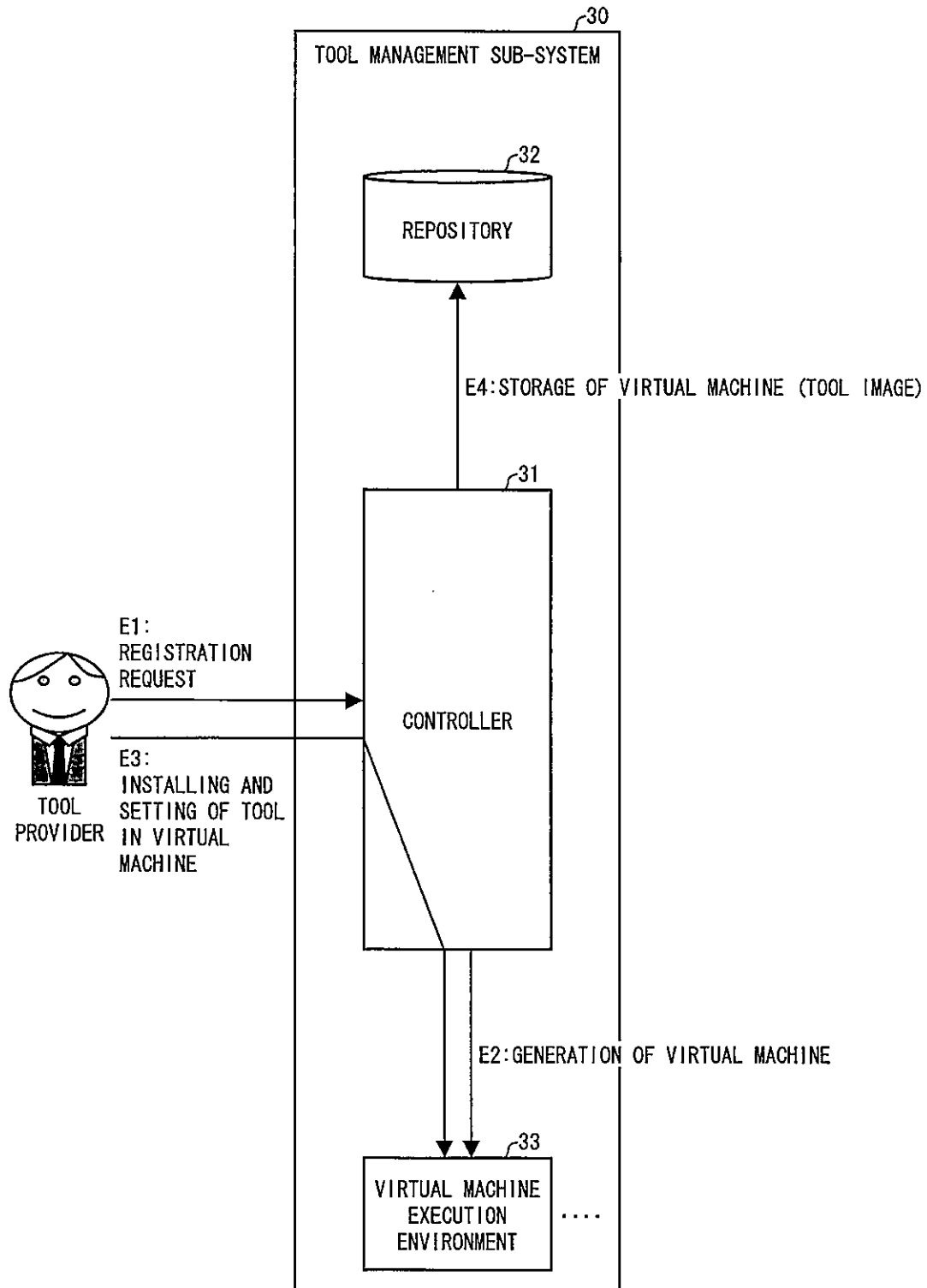


FIG. 7

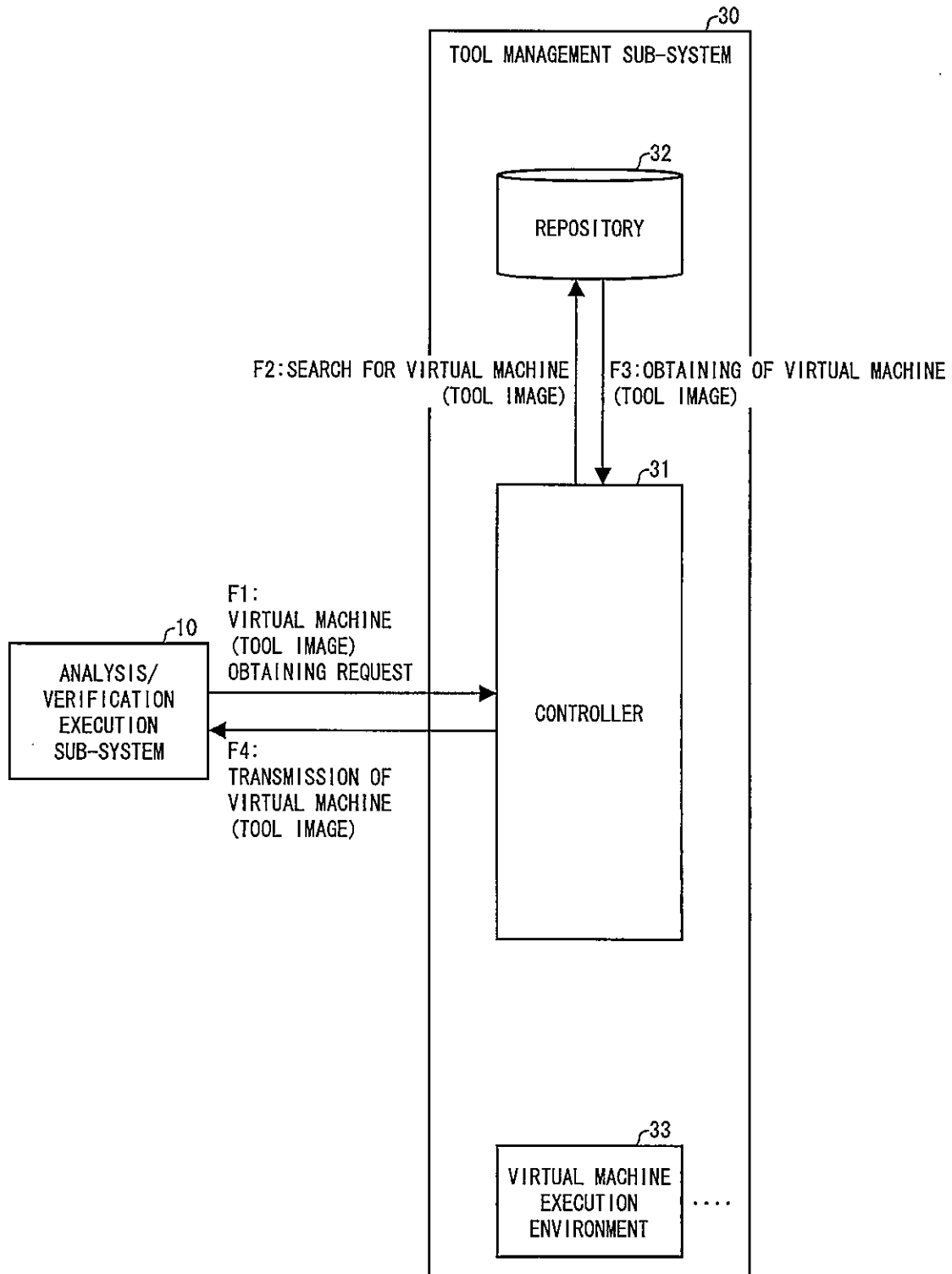


FIG. 8

REQUEST MANAGEMENT DATABASE DBi

Information name	Definition	Examples
User identification information	Identification information on users	USER_A, USER_B, ...
User permission information	Access permission of users	GROUP_AB, PUBLIC, ADMIN, ...
Target program designation information	Information to designate a target program to be analyzed/verified (sum of target program identification information and target program related information)	OBJP_ID_1, C, SYSTEM_PROG, ...
Tool designation information	Information to designate a program analysis/verification tool to be used for analysis/verification (sum of tool identification information and tool related information)	TOOL_ID_0, C, USER_PROG, SYSTEM_PROG, GPU_SPEED_2G, MEM_MAX_1G, ...
Result data identification information	Identification information on result data of analysis/verification	RESULT_0, RESULT_1, ...

FIG. 9

TARGET PROGRAM MANAGEMENT DATABASE DBp

Information name	Definition	Examples
User identification information	Identification information on users	USER_A, USER_B, ...
User permission information	Access permission of users	GROUP_AB, PUBLIC, ADMIN, ...
Target program related information	User can arbitrarily determine the contents and the number. For example, the kind of programming language, the kind of program (distinction between a user program and a system program), etc. for use in the target program.	(Kind of programming language) Java, C, C++, OCaml, ... (Kind of program) USER_PROG, SYSTEM_PROG, LIBRARY, ...
Transmission method designation information	Designation of how to transmit the target program. For example, the target program is transmitted directly by a user, or is imported from an external system.	DIRECT_UPLOAD, IMPORT_git://XXX ...
Target program identification information	Identification information on target program to be analyzed/verified	OBJP_ID_0, OBJP_ID_1, ...

FIG. 10

TOOL MANAGEMENT DATABASE DBt

Information name	Definition	Examples
Tool provider identification information	Identification information on tool providers	USER_A, USER_B, ...
Tool related information	Tool providers can arbitrarily determine the contents and the number. For example, the kind of programming language, the kind of program (distinction between a user program and a system program) with which a program analysis/verification tool can dealt, and an execution environment in which the program analysis/verification tool operates (the kind and the version of operating system, the kind and the version of library, and a necessary computational resource (the clock and the kind of CPU, sizes of a memory and a disk, etc.)).	(Kind of programming language) Java, C, C++, OCaml, ... (Kind of program) USER_PROG, SYSTEM_PROG, LIBRARY, ... (Examples of execution environment and computational resource) OS_Linux_3.X, LIB_libgplk_1.X, CPU_KIND_X86, CPU_SPEED_2G, CPU_NUM_8, MEM_MAX_1G, DISK_MAX_4G, ...
Tool identification information	Identification information on virtual machine including tool image in which a program analysis/verification tool to be used for analysis/verification has been installed and set	TOOL_ID_0, TOOL_ID_1, ...

FIG. 11

