

CLAIMS

1. A computer program product for facilitating processing in a computing environment, said computer program product comprising:
 - a computer readable storage medium readable by a processing circuit and storing instructions for performing a method comprising:
 - obtaining an instruction to perform an action related to one or more guarded storage controls; and
 - executing the instruction to perform the action, the executing comprising:
 - obtaining, from a location, content associated with the one or more guarded storage controls, the one or more guarded storage controls to control operation of a guarded storage facility used to guard a portion of memory; and
 - performing the action using the content.
2. The computer program product of claim 1, wherein the action comprises a load, the obtaining the content comprises obtaining the content from memory, and the performing the action comprises loading the content obtained from memory into the one or more guarded storage controls.
3. The computer program product of claim 2, wherein the one or more guarded storage controls comprise at least one register selected from a group of registers consisting of: a designation register used to designate an area of memory to be guarded, a mask register indicating whether one or more sections of the area of memory are to be guarded, and a parameter list address register to designate a location of one or more attributes of a guarded storage event.
4. The computer program product of claim 2, wherein the obtaining the content from memory comprises obtaining the content from a control block in memory.
5. The computer program product of claim 4, wherein the control block comprises content of a guarded storage designation register, content of a guarded storage section mask register, and content of a guarded storage event parameter list address register.

6. The computer program product of claim 1, wherein the action comprises a store, the obtaining the content comprises obtaining the content from the one or more guarded storage controls, and the performing the action comprises storing the content obtained from the one or more guarded storage controls into memory.

7. The computer program product of claim 6, wherein the one or more guarded storage controls comprise at least one register selected from a group of registers consisting of: a designation register used to designate an area of memory to be guarded, a mask register indicating whether one or more sections of the area of memory are to be guarded, and a parameter list address register to designate a location of one or more attributes of a guarded storage event.

8. The computer program product of claim 6, wherein the storing comprises storing the content in a control block in memory.

9. The computer program product of claim 1, wherein the one or more guarded storage controls comprise a designation register used to designate an area of memory to be guarded, a mask register indicating whether one or more sections of the area of memory are to be guarded, and a parameter list address register to designate a location of one or more attributes of a guarded storage event.

10. The computer program product of claim 1, wherein the instruction comprises a load guarded storage controls instruction comprising an operation code to specify a load guarded storage controls operation, and at least one field to define an address, the address designating a location in memory from which contents are loaded into the one or more guarded storage controls.

11. The computer program product of claim 1, wherein the instruction comprises a store guarded storage controls instruction comprising an operation code to specify a store guarded storage controls operation, and at least one field to define an address, the address designating a location in memory to which contents of the one or more guarded storage controls are stored.

12. A computer system for facilitating processing in a computing environment, said computer system comprising:
- a memory; and
 - a processor in communication with the memory, wherein the computer system is configured to perform a method, said method comprising:
 - obtaining an instruction to perform an action related to one or more guarded storage controls; and
 - executing the instruction to perform the action, the executing comprising:
 - obtaining, from a location, content associated with the one or more guarded storage controls, the one or more guarded storage controls to control operation of a guarded storage facility used to guard a portion of memory; and
 - performing the action using the content.
13. The computer system of claim 12, wherein the action comprises a load, the obtaining the content comprises obtaining the content from memory, and the performing the action comprises loading the content obtained from memory into the one or more guarded storage controls.
14. The computer system of claim 13, wherein the one or more guarded storage controls comprise at least one register selected from a group of registers consisting of: a designation register used to designate an area of memory to be guarded, a mask register indicating whether one or more sections of the area of memory are to be guarded, and a parameter list address register to designate a location of one or more attributes of a guarded storage event.
15. The computer system of claim 12, wherein the action comprises a store, the obtaining the content comprises obtaining the content from the one or more guarded storage controls, and the performing the action comprises storing the content obtained from the one or more guarded storage controls into memory.
16. The computer system of claim 12, wherein the one or more guarded storage controls comprise a designation register used to designate an area of memory to be guarded, a mask register indicating whether one or more sections of the area of memory are to be guarded, and a

parameter list address register to designate a location of one or more attributes of a guarded storage event.

17. A computer-implemented method of facilitating processing in a computing environment, said computer-implemented method comprising:

obtaining an instruction to perform an action related to one or more guarded storage controls; and

executing, by at least one processor, the instruction to perform the action, the executing comprising:

obtaining, from a location, content associated with the one or more guarded storage controls, the one or more guarded storage controls to control operation of a guarded storage facility used to guard a portion of memory; and

performing the action using the content.

18. The computer-implemented method of claim 17, wherein the action comprises a load, the obtaining the content comprises obtaining the content from memory, and the performing the action comprises loading the content obtained from memory into the one or more guarded storage controls.

19. The computer-implemented method of claim 17, wherein the action comprises a store, the obtaining the content comprises obtaining the content from the one or more guarded storage controls, and the performing the action comprises storing the content obtained from the one or more guarded storage controls into memory.

20. The computer-implemented method of claim 17, wherein the one or more guarded storage controls comprise a designation register used to designate an area of memory to be guarded, a mask register indicating whether one or more sections of the area of memory are to be guarded, and a parameter list address register to designate a location of one or more attributes of a guarded storage event.