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Lin et al.

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[54] METHOD AND APPARATUS FOR HANDLING INVALID OPCODE FAULTS VIA EXECUTION OF AN EVENT-SIGNALING MICRO-OPERATION

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[73] Assignee: Intel Corporation, Santa Clara, Calif.

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[21] Appl. No.: 756,074

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[58] Field of Search 395/568, 591, 395/385, 384

[57] ABSTRACT

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A microprocessor that handles invalid opcodes via an event-signaling micro-operation is disclosed. The microprocessor comprises a decoder that decodes macroinstructions, including an opcode, into a single microprocessor cycle micro-operation. The decoder detects invalid opcodes and replaces the invalid opcodes with an event-signaling micro-operation that triggers an invalid opcode assist. The invalid opcode assist triggers an invalid opcode exception handler that processes the invalid opcode.

16 Claims, 5 Drawing Sheets

