

Title (en)
PROCESSOR FOR VARIABLE-LENGTH CHARACTER STRINGS

Title (de)
PROZESSOR FÜR ZEICHENKETTEN VARIABLER LÄNGE

Title (fr)
PROCESSEUR POUR CHAINES DE CARACTERES DE LONGUEUR VARIABLE

Publication
EP 0722583 A1 19960724 (DE)

Application
EP 94928335 A 19940912

Priority
• DE 4334294 A 19931008
• EP 9403045 W 19940912

Abstract (en)
[origin: US5761521A] PCT No. PCT/EP94/03045 Sec. 371 Date Mar. 26, 1996 Sec. 102(e) Date Mar. 26, 1996 PCT Filed Sep. 12, 1994 PCT Pub. No. WO95/10803 PCT Pub. Date Apr. 20, 1995A processor for character strings A, B of variable length serves for the fast detection of match, mismatch and comparative difference conditions between them. The character strings, whose lengths are delimited by character string termination marks, are split into consecutive substrings with a byte count corresponding to the data path width, and processed to detect a match, a mismatch and an end-of-byte mark. Each substring is routed via operand registers (16,18) in parallel to an arithmetic unit (20), a logic unit (22) and a comparator unit (24) and simultaneously processed. The arithmetic unit (20) subtracts one substring from the other substring, the logic unit (22) compares both substrings with each other and the comparator unit (24) compares the bytes of both substrings with the contents of a marking register (26), previously set to the end-of-string mark. These operations are executed in one machine cycle. Output signals from the comparator unit serve to indicate the equality of both substrings, output signals from the logic unit serve to indicate the inequality of both substrings and a carry signal from the arithmetic unit serves at the same time to indicate which of the two substrings is the greater or the lesser.

IPC 1-7
G06F 9/30

IPC 8 full level
G06F 9/305 (2006.01); **G06F 7/02** (2006.01); **G06F 9/34** (2006.01)

CPC (source: EP US)
G06F 7/026 (2013.01 - EP US)

Citation (search report)
See references of WO 9510803A1

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
US 5761521 A 19980602; DE 4334294 C1 19950420; EP 0722583 A1 19960724; JP 3183669 B2 20010709; JP H09503327 A 19970331; WO 9510803 A1 19950420

DOCDB simple family (application)
US 61949696 A 19960326; DE 4334294 A 19931008; EP 9403045 W 19940912; EP 94928335 A 19940912; JP 51121995 A 19940912