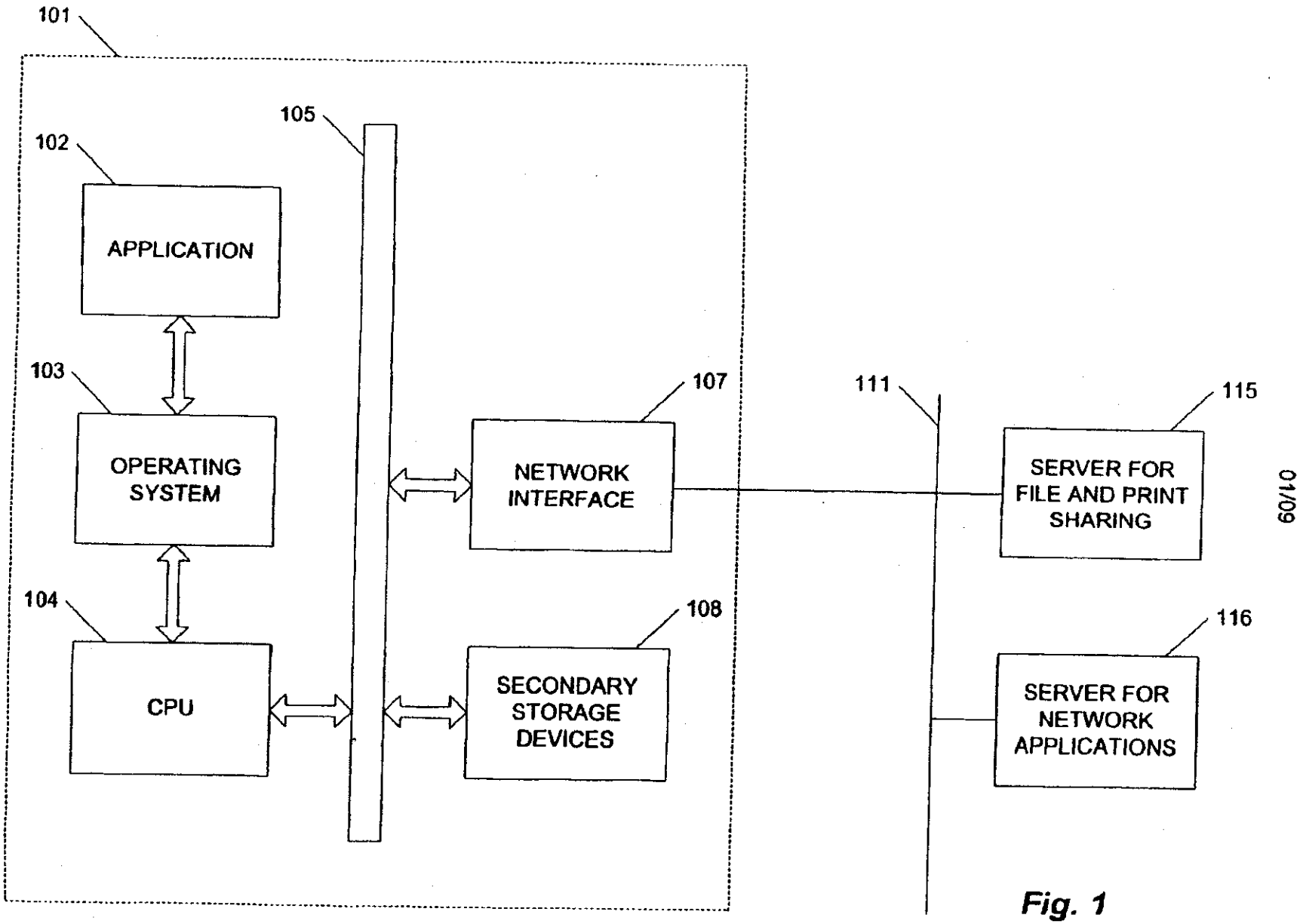


Fig. 1
(Prior Art)

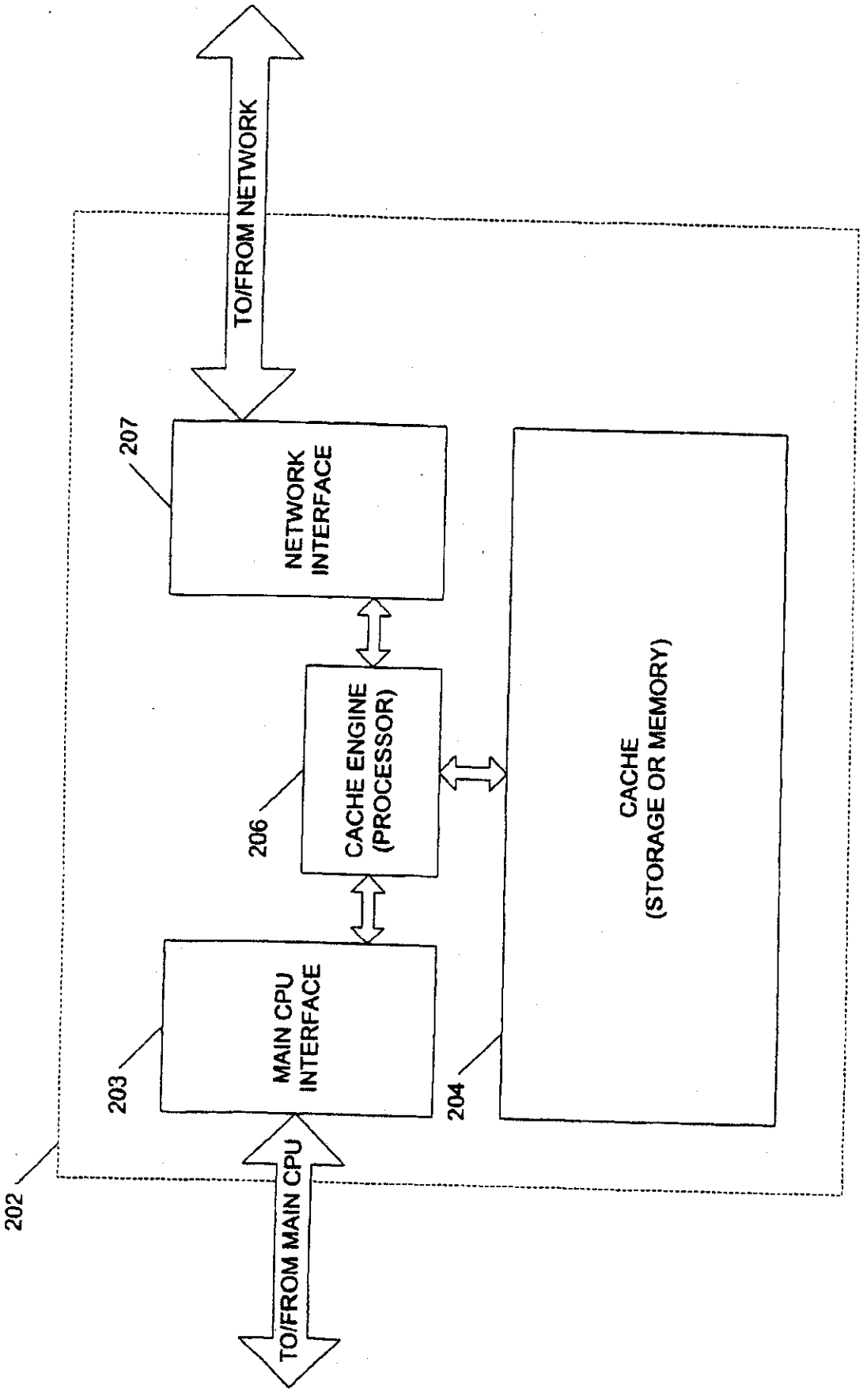

TO/FROM NETWORK
207
NETWORK INTERFACE
206
CACHE ENGINE (PROCESSOR)
CACHE (STORAGE OR MEMORY)
203
MAIN CPU INTERFACE
204
202
TO/FROM MAIN CPU

Fig. 2

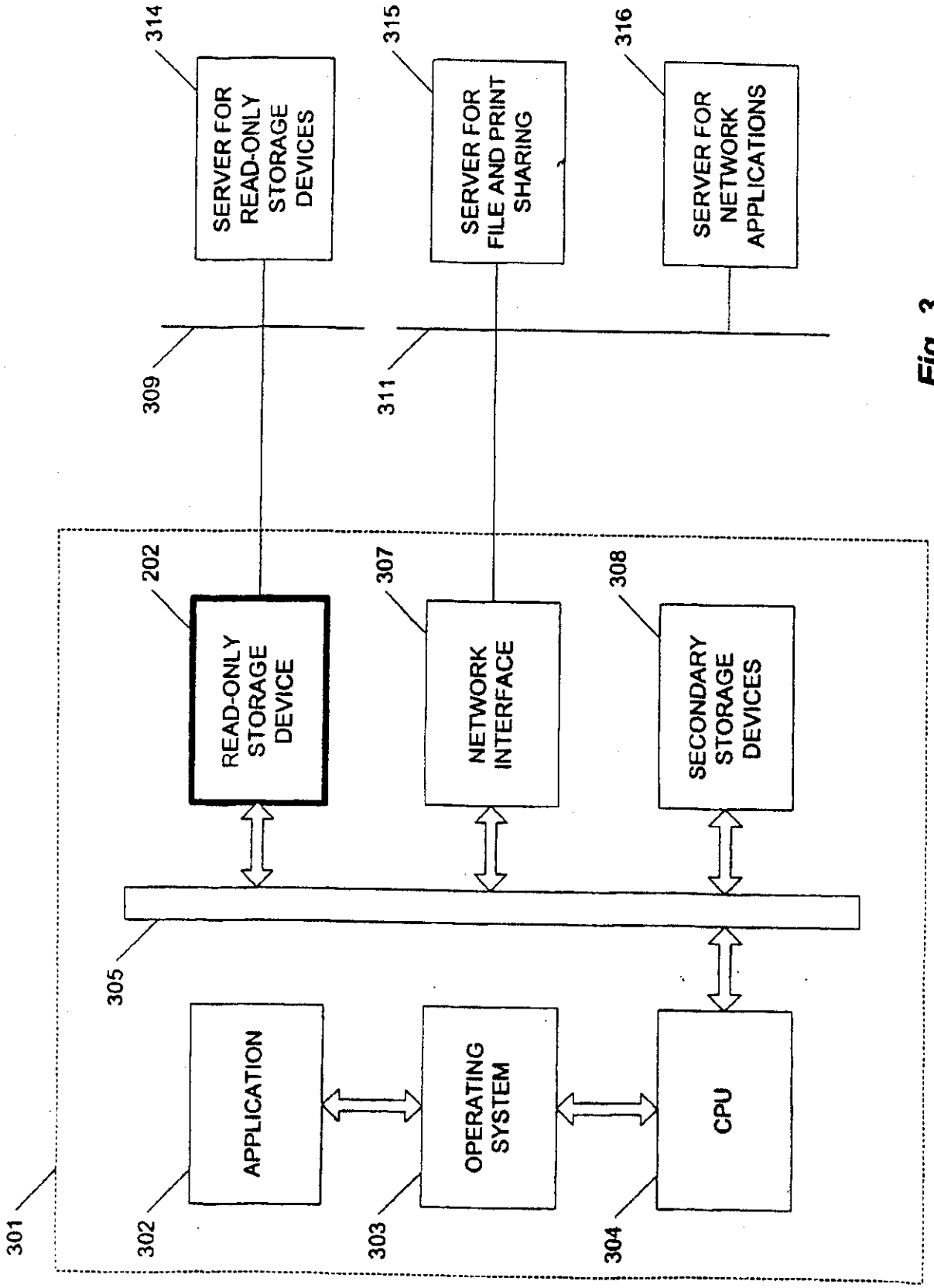

314
SERVER FOR READ-ONLY STORAGE DEVICES
315
SERVER FOR FILE AND PRINT SHARING
316
SERVER FOR NETWORK APPLICATIONS
309
311
202
READ-ONLY STORAGE DEVICE
307
NETWORK INTERFACE
308
SECONDARY STORAGE DEVICES
305
APPLICATION
OPERATING SYSTEM
CPU
301
302
303
304

Fig. 3

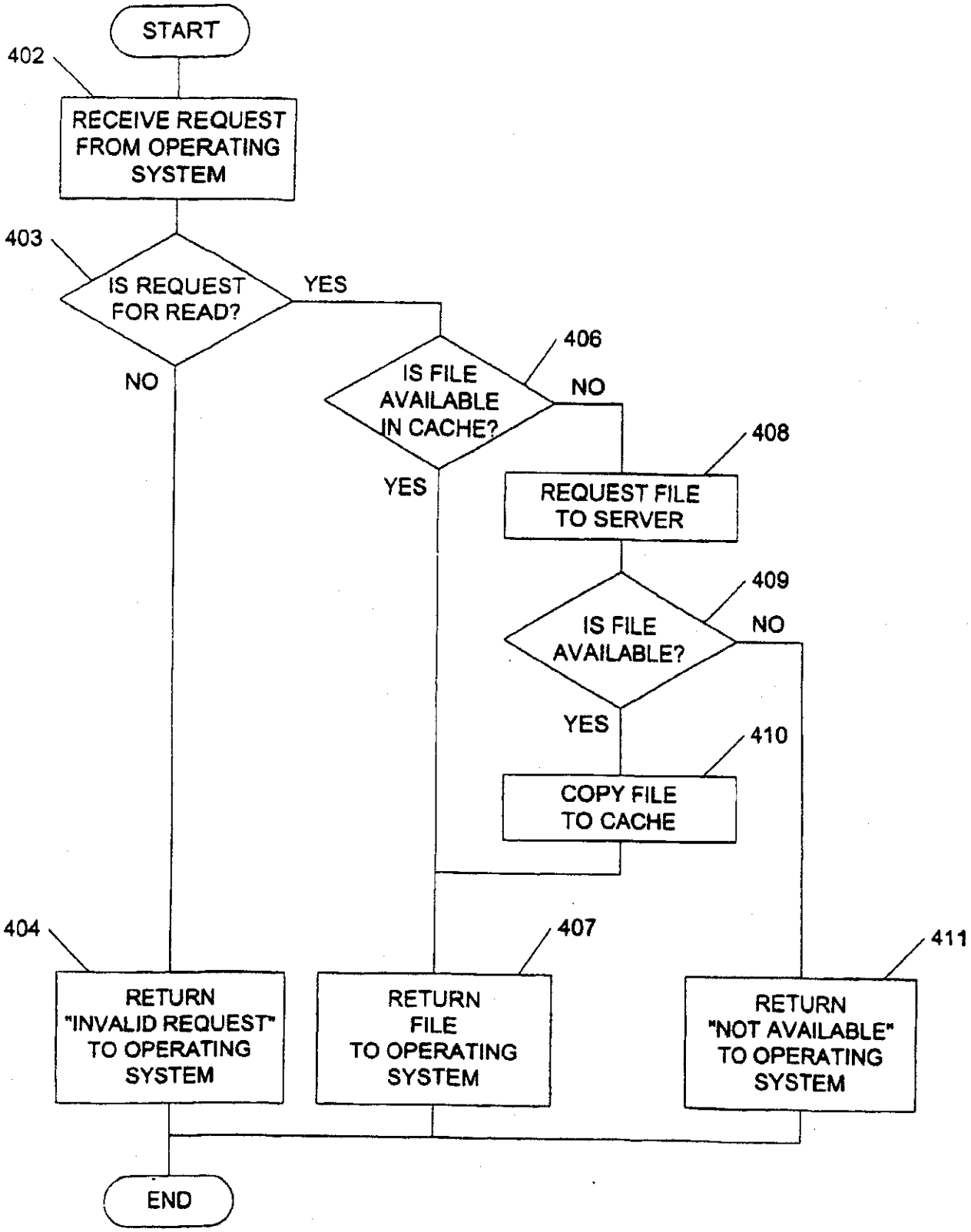

START
402
RECEIVE REQUEST FROM OPERATING SYSTEM
403
IS REQUEST FOR READ?
YES
NO
406
IS FILE AVAILABLE IN CACHE?
NO
YES
408
REQUEST FILE TO SERVER
409
IS FILE AVAILABLE?
NO
YES
410
COPY FILE TO CACHE
404
RETURN "INVALID REQUEST" TO OPERATING SYSTEM
407
RETURN FILE TO OPERATING SYSTEM
411
RETURN "NOT AVAILABLE" TO OPERATING SYSTEM
END

Fig. 4

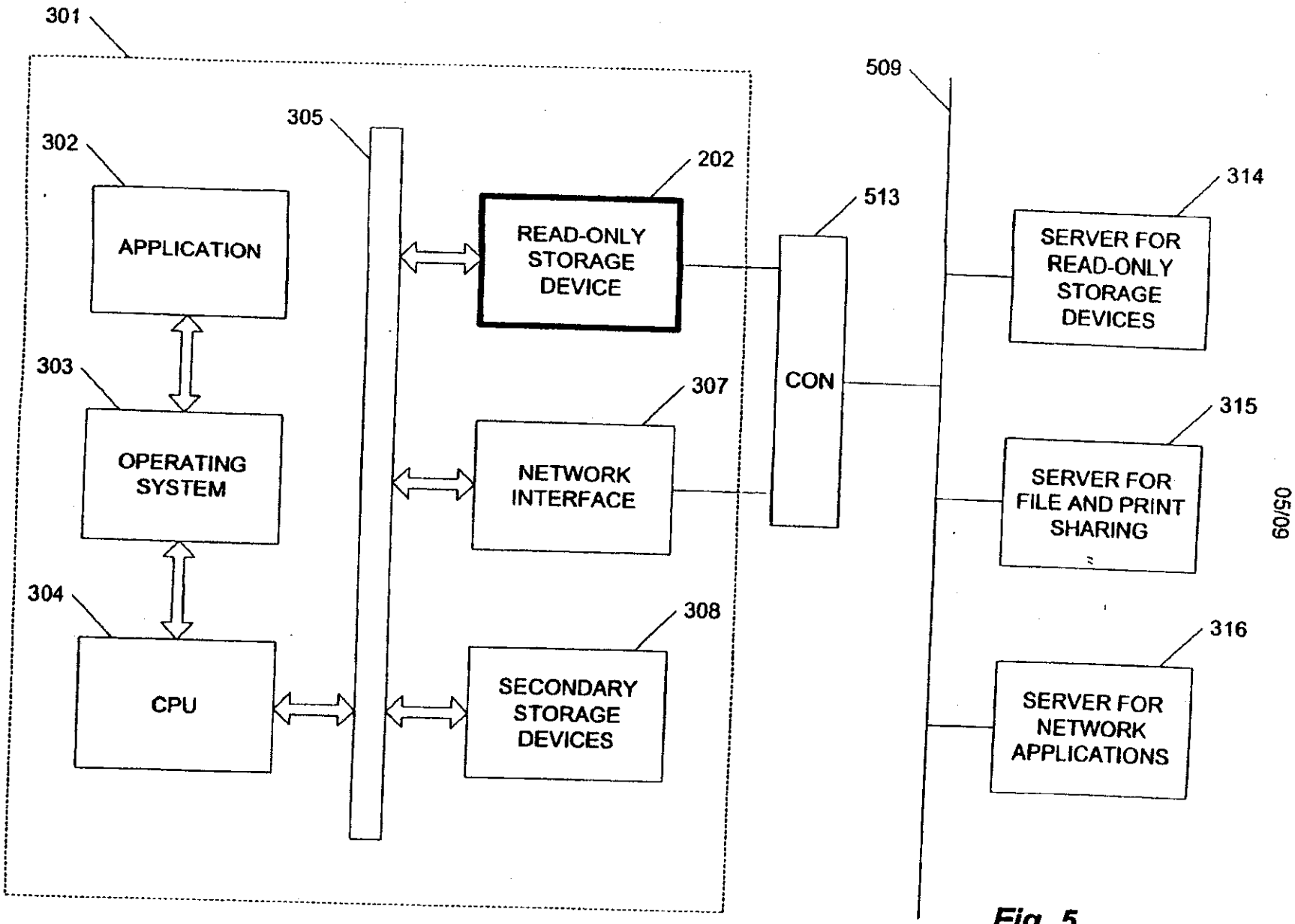

301
302
APPLICATION
303
OPERATING SYSTEM
304
CPU
305
202
READ-ONLY STORAGE DEVICE
307
NETWORK INTERFACE
308
SECONDARY STORAGE DEVICES
513
CON
509
314
SERVER FOR READ-ONLY STORAGE DEVICES
315
SERVER FOR FILE AND PRINT SHARING
316
SERVER FOR NETWORK APPLICATIONS

Fig. 5

05/09

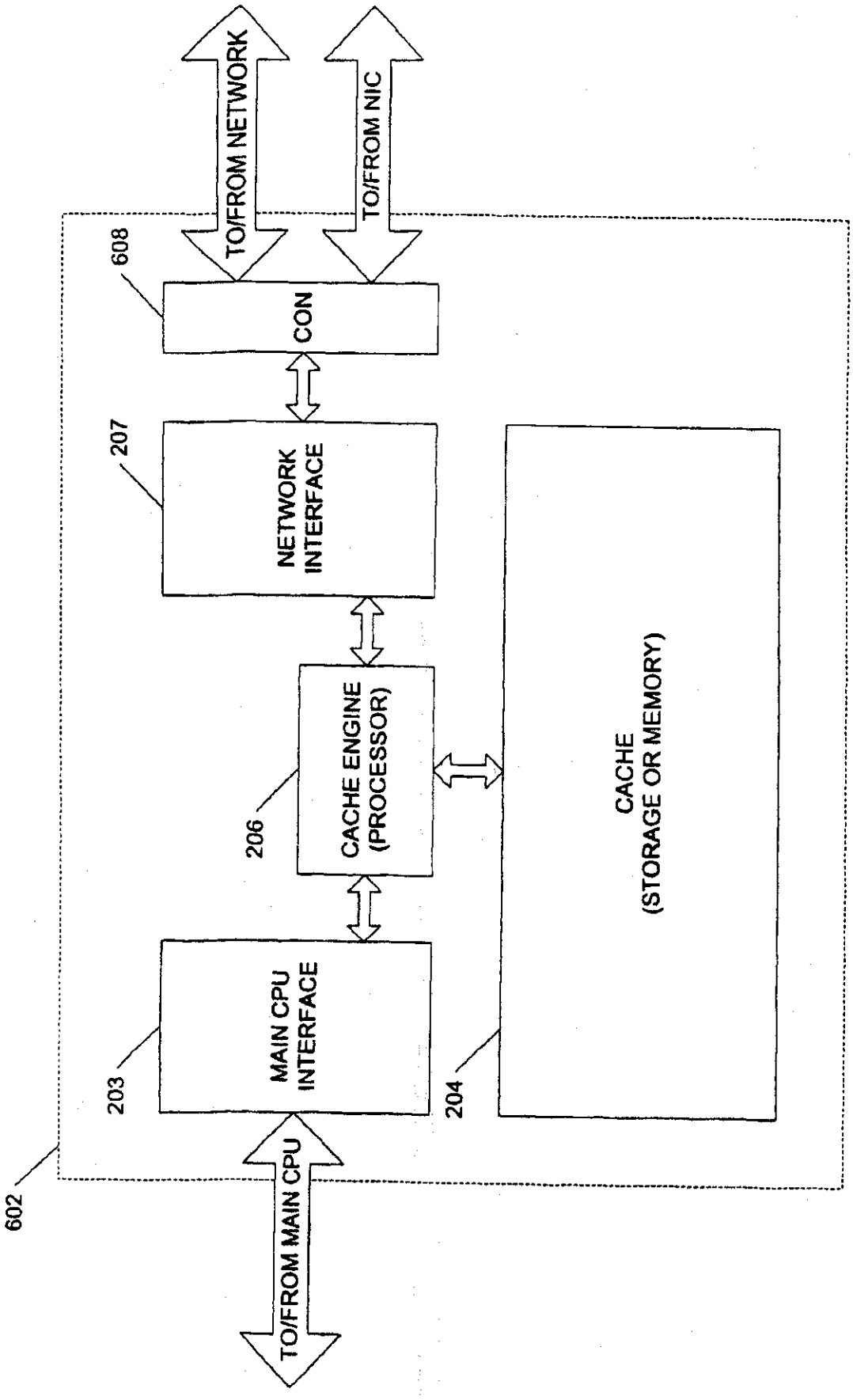

602
TO/FROM MAIN CPU
203
MAIN CPU INTERFACE
206
CACHE ENGINE (PROCESSOR)
204
CACHE (STORAGE OR MEMORY)
207
NETWORK INTERFACE
608
CON
TO/FROM NETWORK
TO/FROM NIC

Fig. 6

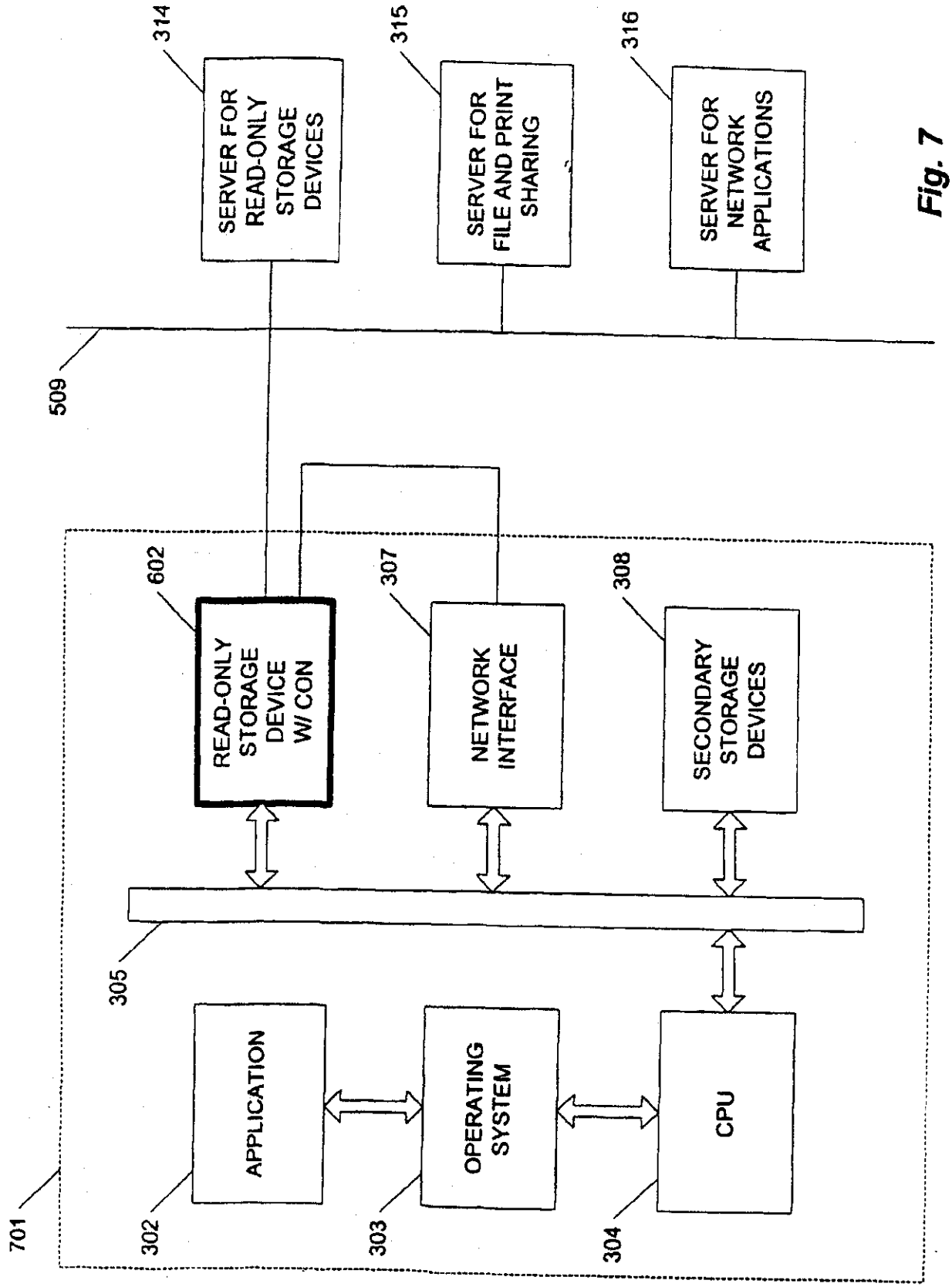

314
SERVER FOR READ-ONLY STORAGE DEVICES
315
SERVER FOR FILE AND PRINT SHARING
316
SERVER FOR NETWORK APPLICATIONS
509
602
READ-ONLY STORAGE DEVICE W/ CON
307
NETWORK INTERFACE
308
SECONDARY STORAGE DEVICES
305
APPLICATION
OPERATING SYSTEM
CPU
302
303
304
701

Fig. 7

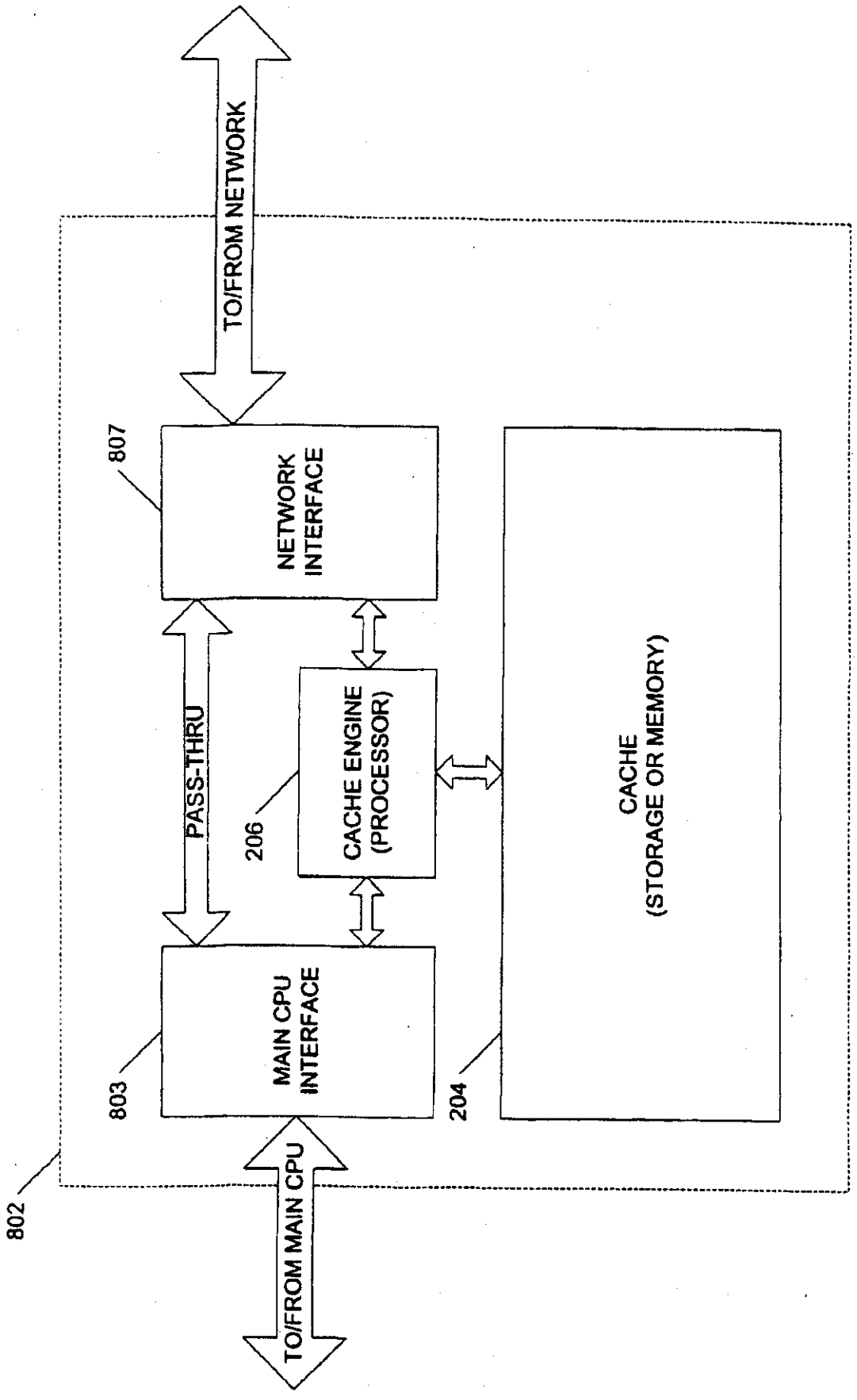

TO/FROM NETWORK
807
NETWORK INTERFACE
PASS-THRU
206
CACHE ENGINE (PROCESSOR)
CACHE (STORAGE OR MEMORY)
803
MAIN CPU INTERFACE
204
TO/FROM MAIN CPU
802

Fig. 8

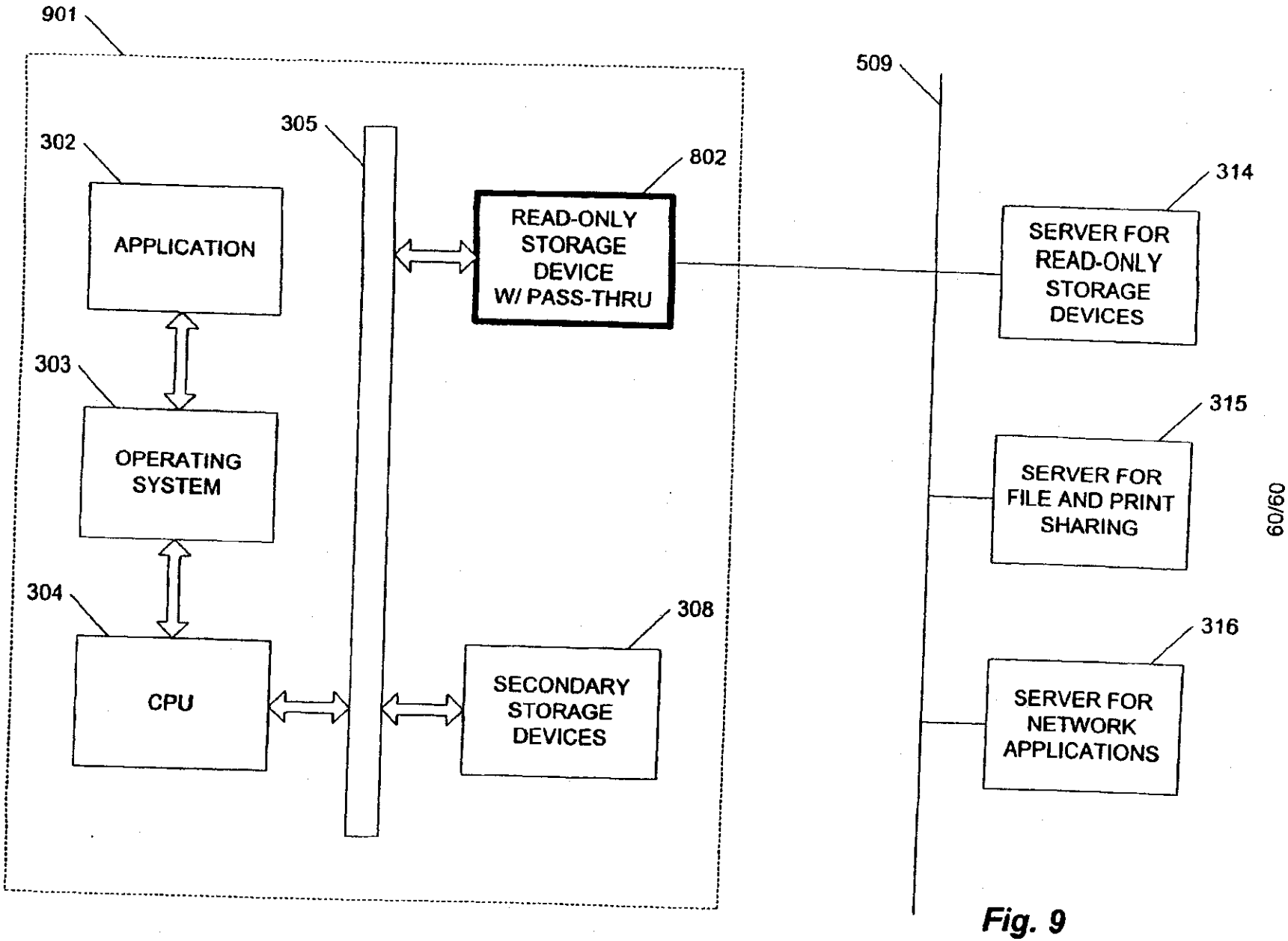

901
509
305
302
802
314
APPLICATION
READ-ONLY STORAGE DEVICE W/ PASS-THRU
SERVER FOR READ-ONLY STORAGE DEVICES
303
315
OPERATING SYSTEM
SERVER FOR FILE AND PRINT SHARING
304
308
316
CPU
SECONDARY STORAGE DEVICES
SERVER FOR NETWORK APPLICATIONS

Fig. 9