

200002452-1



PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

IPUS

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : G06F		A2	(11) International Publication Number: WO 99/26121
			(43) International Publication Date: 27 May 1999 (27.05.99)
(21) International Application Number: PCT/US98/24373		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, (SG) SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).	
(22) International Filing Date: 13 November 1998 (13.11.98)			
(30) Priority Data: 60/065,533 ✓ 13 November 1997 (13.11.97) ✓ US 60/085,427 ✓ 14 May 1998 (14.05.98) ✓ US 60/100,962 ✓ 17 September 1998 (17.09.98) ✓ US			
(71) Applicant: ^① HYPERSPACE COMMUNICATIONS, INC. [US/US]; 9760 Bantry Road, Easton, MD 21601 (US).		Published Without international search report and to be republished upon receipt of that report.	
(72) Inventors: ^① HAFF, Maurice, W.; 9760 Bantry Road, Easton, MD 21601 (US); ^② CLARKE, Christopher, D.; Apartment 274, 2025 Harbour Gates Drive, Annapolis, MD 21401 (US).		3 PDS 1 Appl. 2 INVS. IPC = H04L 9/00, 9/32, G06K 15/20, 13/00, 17/80, 15/173, H04K 1/00.	
(74) Agent: ROYLANCE, Stephen, M.; Greenblum & Bernstein, P.L.C., 1941 Roland Clarke Place, Reston, VA 20191 (US).			
(54) Title: FILE TRANSFER SYSTEM ✓			
(57) Abstract			
<p>A file transfer device, system, and method are provided. The device, system, and method enable a variable number of data transfers and include an initial connection system and a data transfer system. The initial connection system establishes a connection between at least two devices via predetermined listening ports, with at least one predetermined listening port residing within each of the at least two devices. The initial connection system also dynamically assigns a first data port within a first device, and transmits the address of the first data port to a remaining device via the predetermined listening ports. The data transfer system is for each of the variable number of data transfer operations. The data transfer system dynamically assigns a corresponding second data port within the remaining device and transfers data between the connected devices via the data ports so that the data is substantially simultaneously transferred between a variable number of devices via the data ports. Each pair of first and second data ports is established in response to each listening port connection.</p>			