



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 :  
H04J 13/04

A1

(11) International Publication Number: WO 96/38944

(43) International Publication Date: 5 December 1996 (05.12.96)

(21) International Application Number: PCT/US96/08500

(22) International Filing Date: 3 June 1996 (03.06.96)

## (30) Priority Data:

|           |                         |    |
|-----------|-------------------------|----|
| 9510870.0 | 2 June 1995 (02.06.95)  | GB |
| 9511546.5 | 7 June 1995 (07.06.95)  | GB |
| 9513388.0 | 30 June 1995 (30.06.95) | GB |

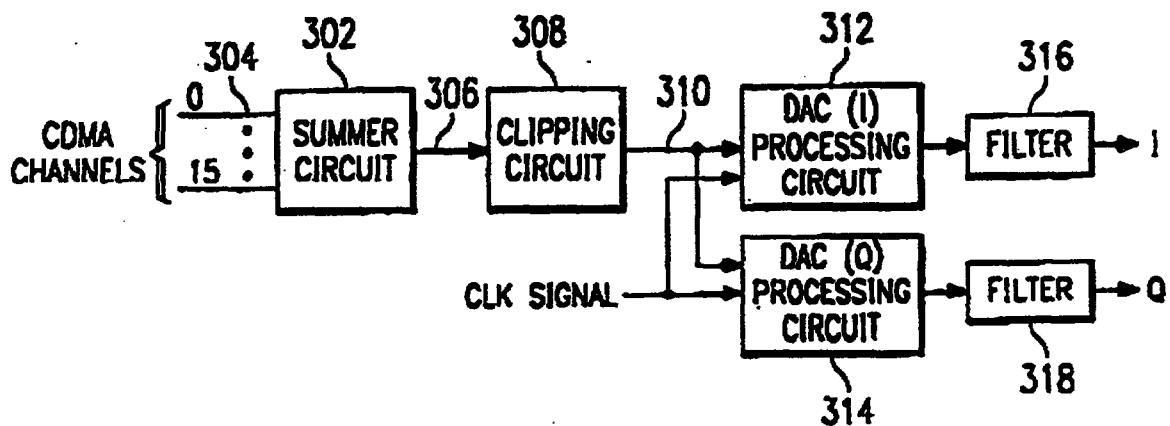
(71) Applicant: DSC COMMUNICATIONS CORPORATION  
[US/US]; 1000 Coit Road, Plano, TX 75075 (US).(72) Inventor: BHAGALIA, Shashikant; 21 Seaton Street, Edmon-  
ton, London N18 2JP (GB).(74) Agent: FISH, Charles, S.; Baker & Botts, L.L.P., 2001 Ross  
Avenue, Dallas, TX 75201-2980 (US).(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY,  
CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL,  
IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV,  
MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU,  
SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN,  
ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent  
(AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent  
(AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU,  
MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM,  
GA, GN, ML, MR, NE, SN, TD, TG).

## Published

With international search report.

Before the expiration of the time limit for amending the  
claims and to be republished in the event of the receipt of  
amendments.

## (54) Title: CDMA TRANSMISSION EMPLOYING CLIPPING FUNCTION



## (57) Abstract

A CDMA signal processing circuit (300) includes a summer circuit (302) that receives a plurality of CDMA signals from a plurality of channels (304). The summer circuit (302) combines the plurality of CDMA signals according to a power magnitude value and power direction value associated with each CDMA signal. The summer circuit (302) generates a summed signal (306) that is applied to a clipping circuit (308). The clipping circuit (308) removes a portion of the summed signal (306) outside a desired threshold range and generates a clipped signal (310) therefrom. Digital to analog processing circuits (312 and 314) convert the clipped signal (310) into a half width encoded format. Digital to analog processing circuits (312 and 314) transform the half width encoded clipped signal into analog I and Q signals, respectively. The analog I and Q signals are applied to corresponding filters (316 and 318) prior to transmission.