

(12) **UK Patent Application** (19) **GB** (11) **2 421 674** (13) **A**

(43) Date of Printing by UK Office **28.06.2006**

(21) Application No: **0603563.8**  
(22) Date of Filing: **05.08.2004**  
(30) Priority Data:  
(31) **60494072** (32) **07.08.2003** (33) **US**  
(86) International Application Data:  
**PCT/US2004/025232 En 05.08.2004**  
(87) International Publication Data:  
**WO2005/018134 En 24.02.2005**

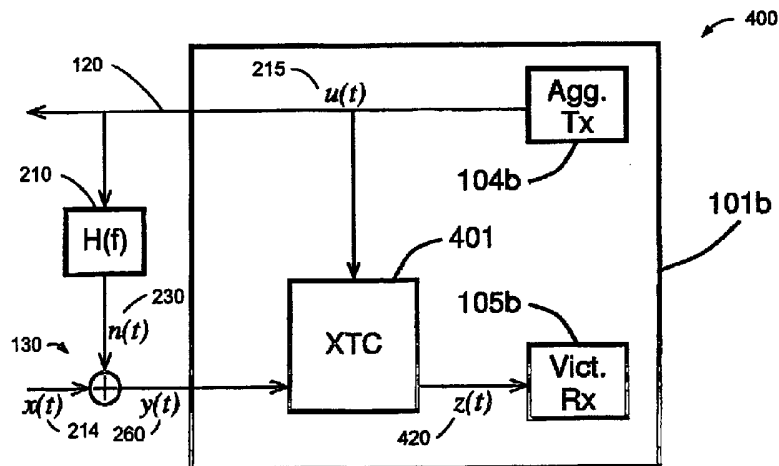
(51) INT CL:  
**H04R 5/00** (2006.01) **H04J 1/12** (2006.01)  
**H04J 3/10** (2006.01) **H04J 15/00** (2006.01)  
(52) UK CL (Edition X ):  
**H4R RLES**  
(56) Documents Cited by ISA:  
**US 6411117 B1** **US 20040218756 A1**  
**US 20040213354 A1**  
(58) Field of Search by ISA:  
INT CL **H04J, H04R**  
Other:

(71) Applicant(s):  
**Quellan Inc**  
**75 Fifth Street N W, Suite 210, Atlanta,**  
**Georgia 30308, United States of America**  
(72) Inventor(s):  
**Andrew Joo Kim**  
**Michael G Vrazel**  
**Sanjay Bajekal**  
**Charles Summers**

(continued on next page)

(54) Abstract Title: **Method and system for crosstalk cancellation**

(57) Signals propagating in one communication channel can generate crosstalk interference in another communication channel. A crosstalk cancellation device can process the signals causing the crosstalk interference and generate a crosstalk cancellation signal that can compensate for the crosstalk when applied to the channel receiving crosstalk interference. The crosstalk cancellation device can include a model of the crosstalk effect that generates a signal emulating the actual crosstalk both in form and timing. The crosstalk cancellation device can include a controller that monitors crosstalk-compensated communication signals and adjusts the model to enhance crosstalk cancellation performance. The crosstalk cancellation device can have a mode of self configuration or calibration in which defined test signals can be transmitted on the crosstalk-generating channel and the crosstalk-receiving channel.



**GB 2421674 A continuation**

(74) Agent and/or Address for Service:  
**R G C Jenkins & Co**  
**26 Caxton Street, London, SW1H 0RJ,**  
**United Kingdom**