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## **Telepathic Communication Generation using Nano Fiber Ring**

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**Abstract:** The communication security is set up by registration during the first belief and get in touch between two human beings. The safety codes among them are generated and the records are blocked by these protection codes if the end user is not the required one. On the other hand, the unlocked records are transmitted if the required end user is confirmed by the feedback brain signals via the comments mind indicators such as telepathic hyperlink. The specified safety codes are emerged and the records are transmitted. Furthermore, the quantum flip-flop alerts can also be generated by way of the usage of a coherent mild source propagates within micro-optical tool. The Rabi oscillation frequency can be set up to start/stop the transmission bits security. The circulation of information may be securely transmitted inside the telepathic communication. In this study by input Gaussian pulse into nano ring resonator (NRR), coding signal as secured communication can be generated to use telepathy communication.

Key words: Telepathy, Security Communication, Memory.

#### 1. INTRODUCTION

Communications between minds via telepathy as a new scientific phenomenon of physics has attracted numerous attentions in recent years. This kind of communications consist ideas, thoughts, senses, subjective aspects and also feelings. Although, definition of telepathic was not found in scientific studies, in some tribal of Australia, telepathy has been admitted as a human faculty. However, telepathy is thought a specific capability relevant to psychics and mystics in more advanced societies [1, 2]. In addition, telepathy is used to govern the brain functions, test the reminiscence of other people, receive and transmit the thoughts directly among people with none bodily method along with vocal or auditory mechanisms. Telepathy exists throughout area which

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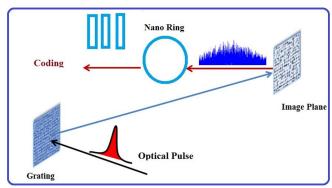
seems in several studies among numerous races [3] with a vested interest to study the recollections of other species and decorate or get better lost memories. Some communication can exchange thoughts with others in their very own species and some can send but not receive and vice versa [4]. Betazoids, for one instance, can ship their thoughts most effective to different empathy and telepaths, however can receive thoughts and feelings from nearly any being's mind, psionically talented or not [5]. In some races, telepathy is presented in all healthy people. However in some species, such as a person, telepathy is in frequent and certain species, drastically the Ferengi, never telepath [6, 7]. Telepathy makes viable some kinds of interaction that could in any other case be impossible [7, 8]. Miranda Jones has set up a telepathic link with Ambassador Kollos [9]. Telepathic races along with the Betazoids and Vulcans typically broaden an ethical code (now and again making it real law, as do the Ullians) which exactly dictates below what circumstances such powers may be used. Vulcan telepathy, although, is more confined, usually practiced within the shape of the thoughts meld, coupled with Vulcan legitimate and mental molding [10, 11]. Signal pulses of microwave could be heard by way of some human beings as "pops" or "clicks", while a train of uniform pulses could be heard as a buzz, without privilege of any form of receptor [10, 12, 13]. Numerous variety of frequencies are around 125 MHz (properly below microwave) and can be tough for some mixture of pulse energy and pulse width.

## 2. SECURED COMMUNICATION MECHANISM

The scanning image facts is identified by million mind cells and is addressed in the mind reminiscence via many layers and sub-layers inside the brain cloud computer [14, 15]. The image recuperation is realized by using evaluating the photograph sample reputation, in which the possibility of image sample projection as the equal photo possibility is the criteria of recovery and conclusion. The projection of coherent signals deliver the de-coherent states, whereas the crumble of waves realize the required results. In electronic mind control, the specified pulse height energy is set 3 W/cm<sup>2</sup> in line with square centimeter of cranium surface which is carried out or wished for a very small percentage of each pulse's cycle time. 3 W/cm<sup>2</sup> is power acquired underneath a 250 W heat lamp at a distance of 1 meter. When the pulse train is off, for example no sign for maximum of each cycle, the average power is too small and unsearchable. This concept recognize as "spike" waves which are utilized in radar and different military communications where the frequency operates as voice-to-skull carriers are not single frequencies, in equal manner as for TV or cell phone channels. Every sensitive frequency is virtually a range or "band" of frequencies. A method used to reduce each interference and detection is called "spread spectrum". Spread spectrum pulse usually contain the service frequency called "hop" round exact band. The spread spectrum pulse is received on a

spectrum analyzer which appears as "static" or noise. The success unclassified voice to cranium test has been done in 1974, by Dr. Joseph C. Sharp and Mark Grove on the Walter Reed military Institute of research [16].

A Frey-kind audible pulse is transmitted on every occasion because the voice waveform that is passed down through the zero axes. The sensation is stated as a buzzing, clicking, or hissing which appears to originate within or simply behind the head. The phenomenon occurs with carrier densities as low as microwatts in line with rectangular centimeter for carrier frequencies from 0.3 till 3.0 GHz. By proper preference of pulse characteristics, the wise speech can be created. Figure 1 shows the schematic diagram of the input pulse imaging machine based totally on nonlinear micro ring resonators. The spectral domain pulse-shaping method is defined in schematic diagram.



**Fig. 1.**Schematic diagram of the femtosecond pulse imaging gadget based totally on nonlinear micro ring resonators.

## **Function of System**

The proposed system decomposes the rework-limited laser pulse into the spectral area and modified the spectrum pulse using a one dimensional fixed or programmable spatial mask or hologram. The modified temporal spectrums are then recombined into the time area. For an input pulse such as a Gaussian pulse without statistics, the input optical field in the shape of Gaussian pulse may be expressed as [18-21].

$$E_i = A_i \exp\left[\frac{z}{2L_d} - i\omega_0 t\right] \tag{1}$$

and an output pulse from image plane can be expressed as

$$E_s = A_s \exp\left[\frac{z}{2L_d} - i\omega_0 t\right] \tag{2}$$

Where in the amplitude of optical fields are represented by  $A_i$  and  $A_s$ . The propagation distance is demonstrated by z. The propagation time for Gaussian pulse movements at the group speed in a body is  $T = t - \beta_1 \times z$ . Here, t is the pulse section shift time, and is the frequency shift of the pulse.  $L_d = T_0^2/|\beta_2|$ represents the dispersion period of the Gaussian pulse, wherein suggests Gaussian pulse propagation time on the preliminary enter. The coefficients of the linear and the second order terms of the Taylor's expansion of the propagation steady are  $\beta_1$  and  $\beta_2$ , respectively. For the Gaussian pulse in the micro ring device, a stability need to be performed between the dispersion duration  $(L_d)$  and the nonlinear duration [15, 17]. Consider a pulse produced with the aid of the pulse-shaping tool is incident on the primary reflecting grating of the heartbeat imaging gadget as shown in Figure 1 at a prevalence angle φ. The grating is organized such that the primary diffraction order for the spectral thing at the center service frequency ω propagates into the route of the optical axis of the system. As the pulse arrives at plane 2, an unmarried spectral aspect of the incident area at an arbitrary frequency ω is produced in a diffracted area. After aircraft 2, the heartbeat carries information from photo which is then transformed into telepathy using single nano ring resonator (NRR) [18, 19].

Totally at the coupling coefficient of nano ring resonator, a fraction of enter Gaussian pulse is coupled into the NRR. For lengthy dispersive course,  $E_i$  reasons the nonlinearity effect constructed up within the NRR because of exchange of the refractive index with optical electricity. Here, the electricity dependence of refractive index is responsible for the Kerr effect [20, 21]. The refractive index can be written as [22]:

$$n = n_0 + (\frac{n_2}{A_{eff}}) |E_s(t)|^2$$
 (3)

Where  $n_0$  and  $n_2$  are the linear and nonlinear refractive indexes respectively and indicates the effective mode core place of the waveguide. In each spherical ride a segment shift of is  $\xi = \exp(-\alpha L_i / 2 - iKnL_i)$  introduced into the Gaussian pulse while propagating through MRR. One round trip loss coefficient is consider as  $x = \exp(-\alpha L_i / 2)$  where  $L_i$  is the circumference of the NRR and is the waveguide absorption coefficient. The vacuum wave range and refractive index of the waveguide are represented via K and n, respectively. The pulse passes into the NRR and enter Gaussian pulse after each round interfere. The optical outputs from the first ring resonator are given as [18]:

$$E_{out}^{1} = E_{s}\left(\frac{C_{1} - (1 - \gamma_{1})\xi_{1}}{(1 - C_{1}\xi_{1})}\right) \tag{4}$$

Where  $C_1 = \sqrt{(1-\kappa_1)(1-\gamma_1)}$  is the fraction of input pulse that coupled to the NRR,  $k_I$  is the coupling coefficient of the first ring and  $\gamma_1$  shows the fractional intensity loss of the first coupler. The output pulse from each NRR in proposed system that shows in Figure 2 is fed to the next NRR. The output pulse from a machine of nano ring resonator can determine as:

$$E_{out}^{N} = E_{s} \prod_{j=1}^{N} \frac{C_{j} - (1 - \gamma_{j}) \xi_{j}}{(1 - C_{j} \xi_{j})}$$
 (5)

The output power from every ring can be determined as

$$P_{out}^{j} = (E_{out}^{j}).(E_{out}^{j})^{*} = \left| E_{out}^{j} \right|^{2}$$
 (6)

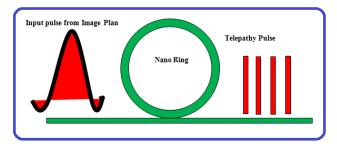
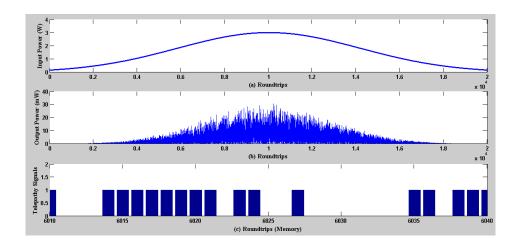


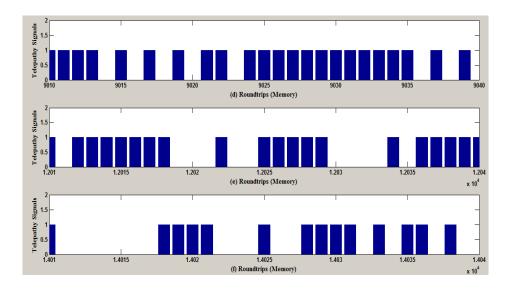
Fig. 2. Schematic of telepathy pulse generation

### 2. RESULTS AND DISCUSSION

In order to generate telepathy pulse a Gaussian pulse with strength at 5W is fed into the device as shown in Figure 3(a). The linear and nonlinear refractive index of the machine which is Indium Gallium Arsenide Phosphide (InGaAs/P) is  $n_0$ =3.5 and  $n_2$  = 4.2×10<sup>-17</sup> ( $m^2$ /W) respectively. The waveguide loss and coupler intensity loss are  $\alpha$ = 0.2 (dB/mm) and  $\gamma$  = 0.2, respectively. The coupling coefficients of the nano ring resonator vary among 0.1 to 0.5. The radius of nano ring is 90 nm. The powerful mode area regions of the nano ring

resonators are varied in the range 0.1 to  $0.5~\mu m^2$ . While the input optical pulse meets the resonance condition of every nano ring resonator, it couples to the ring and travel round inside it. At this time telepathy pulse may be completed based on the normalized pulse and resonant mode numbers of nano ring resonator optical pulse effects as optimistic and unfavorable interference. Consequently, the signals are suppressed over frequency period and the overall depth on this frequency area is amplified in step with the superposition principle. For the reason, that energy consistent with region for optical breakdown decreases with the heart beat duration which is recognized with lasers running inside the telepathy pulse duration regime. Here the heart beat is sliced and amplified into smaller alerts over the spectrum as proven in Fig. 3(b). Figures 3(c), 3(d), 3(e) and 3(f) suggests the normalized telepathy pulses in numerous round trips range which are suitable for telepathic memory and secured communication.





**Fig. 3.** The result of the output signals from proposed gadget where (a) shows the enter Gaussian pulse, (b) the chaotic alerts generation, (c), (d), (e) and (f) show the normalized telepathy pulse in several round trips variety.

Two telepaths may integrate their skills to make a comfortable conversation channel between them. In this case, the ability wished to interrupt the safety is equal to the product - multiplication - of the two man or woman skill levels. Clearly, whilst 3 or extra skilled telepaths shape at an ease hyperlink, it will become most unlikely that anyone man or woman can be capable to interrupt it. Artificial telepathy covers mind analyzing, and secured verbal exchange. This in turn would permit us to lookout personal recollections not just those on the internet web with something just like the performance and reliability of a computer search engine. Artificial Telepathy system could be intelligence gathering and interrogation. As a communication system, it might have a constrained attraction as any country with a comparable setup could both pay attention in, or fake to be the interface. As such, it increases critical moral and felony questions, specifically the question of secrecy given that all major governments could be privy to the machine. For the reason that no law allows this kind of interrogation, its secrecy can be extra to do with criminal hobby on behalf of the security corporations, as opposed to countrywide security. Figure 4 shows the schematic of switch pulse as telepathy.



Fig. 4. Schematic of switch pulse as a telepathy pulse

#### 3. CONCLUSION

The secured communications is the art of electronically moving concept without delay to and from a brain. The number one targets are to show generation which could offer point to point communication from one brain to some other, to localize undesirable sources of telepathic conversation, and to offer proof that technologically applied telepathy is feasible. Technology to block undesirable voices is being investigated. A key objective is to show the existence of criminals who abuse present synthetic telepathy era. Further goals encompass investigating other computational substrates than mind tissue. Some militaries are interested in advertising current artificial telepathy technology. Therefore, generation of telepathy pulse has been done by nano ring resonators.

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