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(71) Applicant: **NEUPHOTONICS LTD.** [IL/IL]; 65 Ha-Pardes St., 7685400 Kfar-Mordehai (IL).

(72) Inventors: **BEN-EZRA, Yosef**; Itzhak Ben-Zvi 27/86, 4902610 Petah Tikva (IL). **LEIDERMAN, Timor**; 10/12 Pe'at Hashulhan St., 6745104 Tel Aviv-Yafo (IL). **BEN-HAIM, Yaniv**; HaPardes 65, 7685400 Kfar-Mordehai (IL).

(74) Agent: **GLAZBERG, Ziv**; Glazberg Applebaum & Co., Advocates & Patent Attorneys, 3 HaYetzira St., Shap House 21st floor, 5252141 Ramat Gan (IL).

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(54) Title: OPTICAL EQUALIZATION OF COMMUNICATION NETWORKS

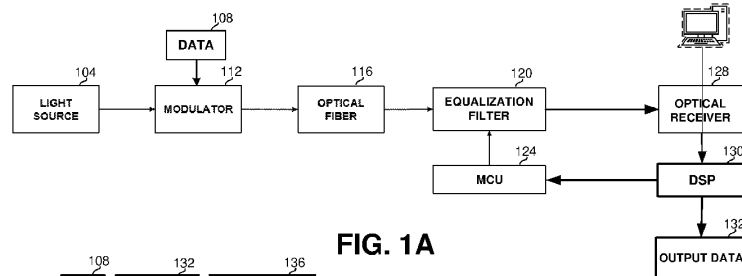


FIG. 1A

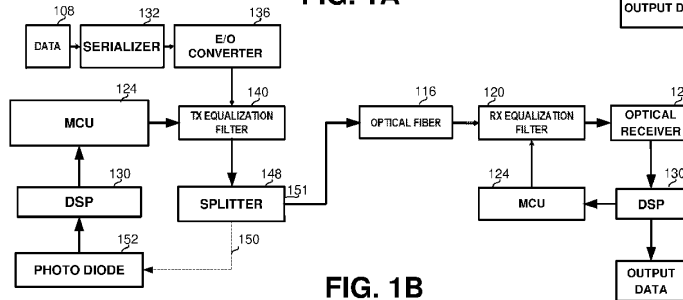


FIG. 1B

(57) Abstract: A method and apparatus for improving transmission in an optical communication system, the method comprising: receiving an optical signal; using an optical equalization filter, equalizing the optical signal to obtain an equalized optical signal; converting the equalized optical signal to an electrical signal; comparing the electrical signal to an expected electrical signal to obtain a comparison result; based on the comparison result, determining one or more optical parameters to be modified for the optical equalization filter; based on the optical parameters to be modified, determining a modification to be applied to the optical equalization filter; and applying the modification to the optical equalization filter, thereby determining in an electrical domain distortions to the optical signal, and applying the changes in an optical domain for correcting distortions introduced to the optical signal.

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