

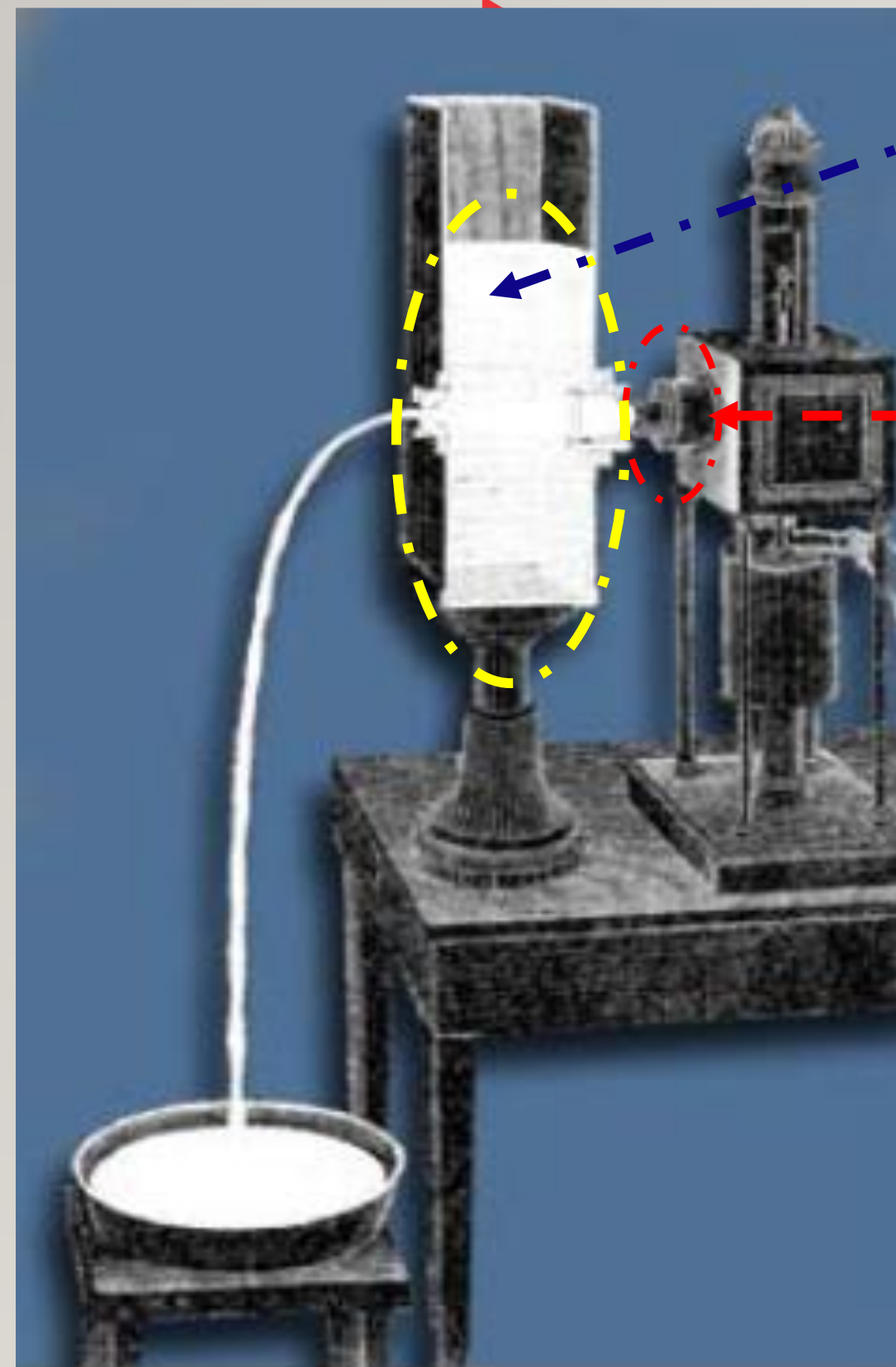
SISTEM KOMUNIKASI OPTIK



- BAB 1
 - Sejarah Perkembangan
 - Komunikasi Serat Optik
- D3 Teknik Telekomunikasi – Fakultas Ilmu Terapan

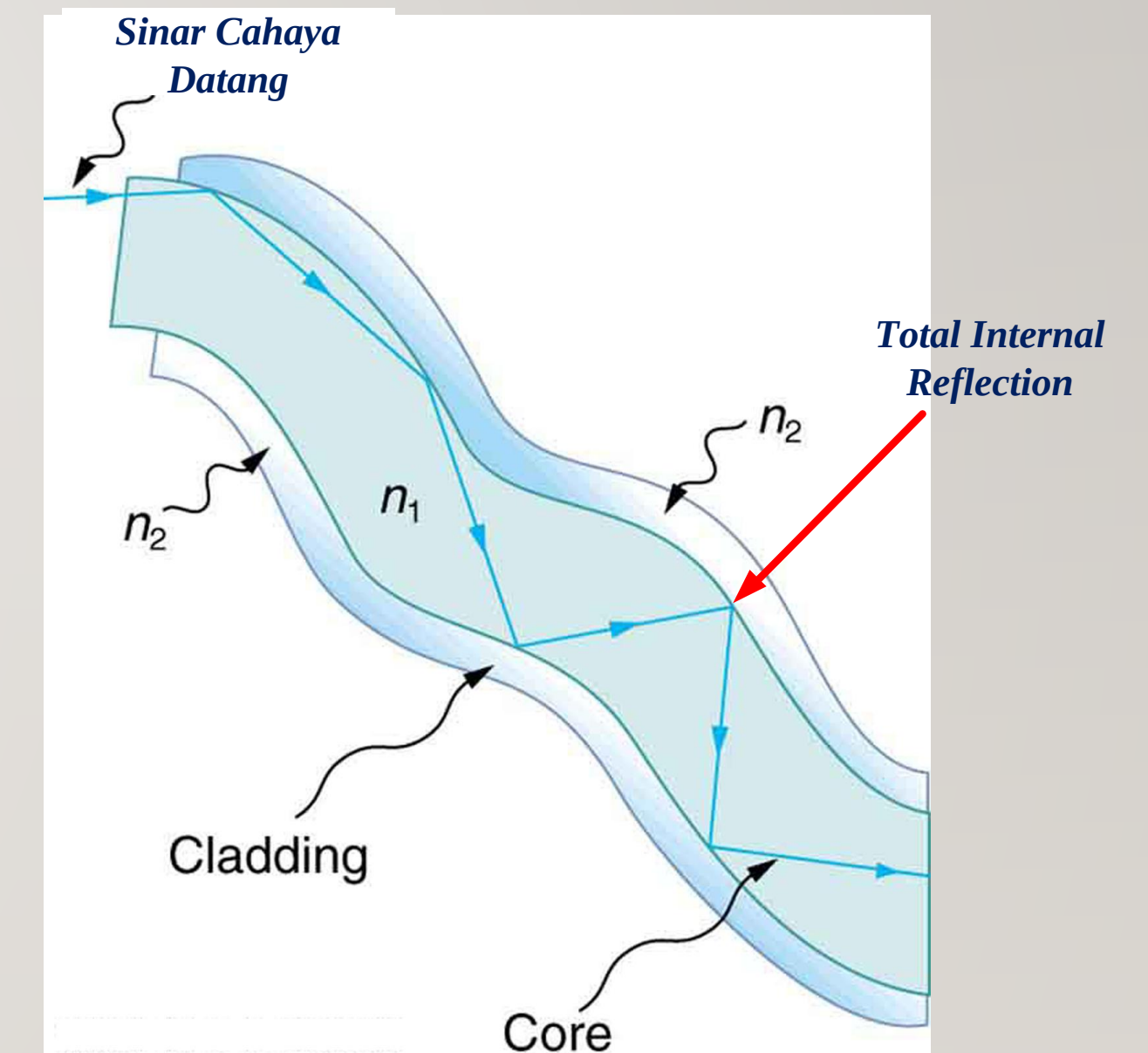
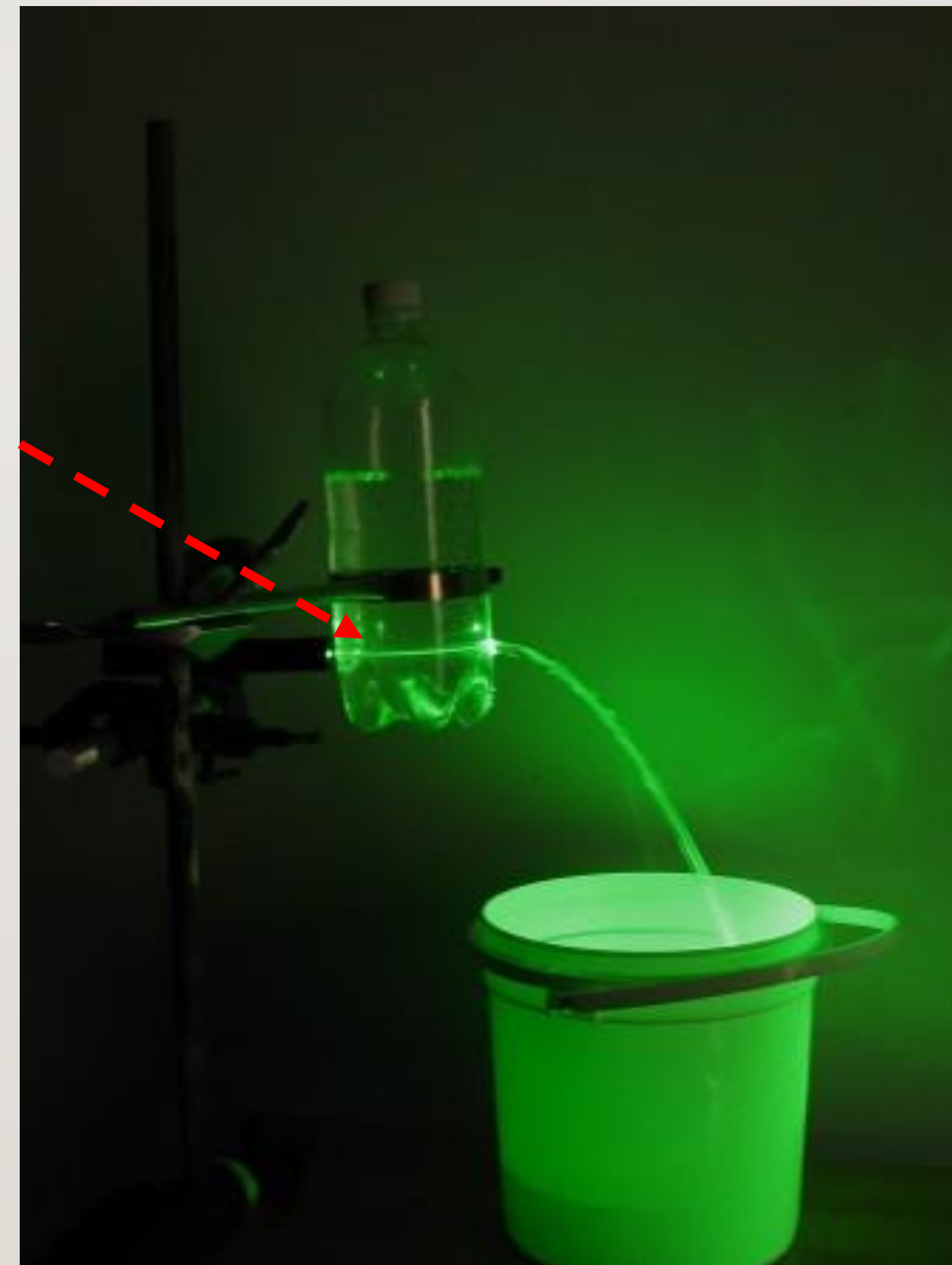
1870 : John Tyndall

2



Tangki yang
berisi Air

Berkas
Cahaya



Gambar. Experiment John Tyndall's

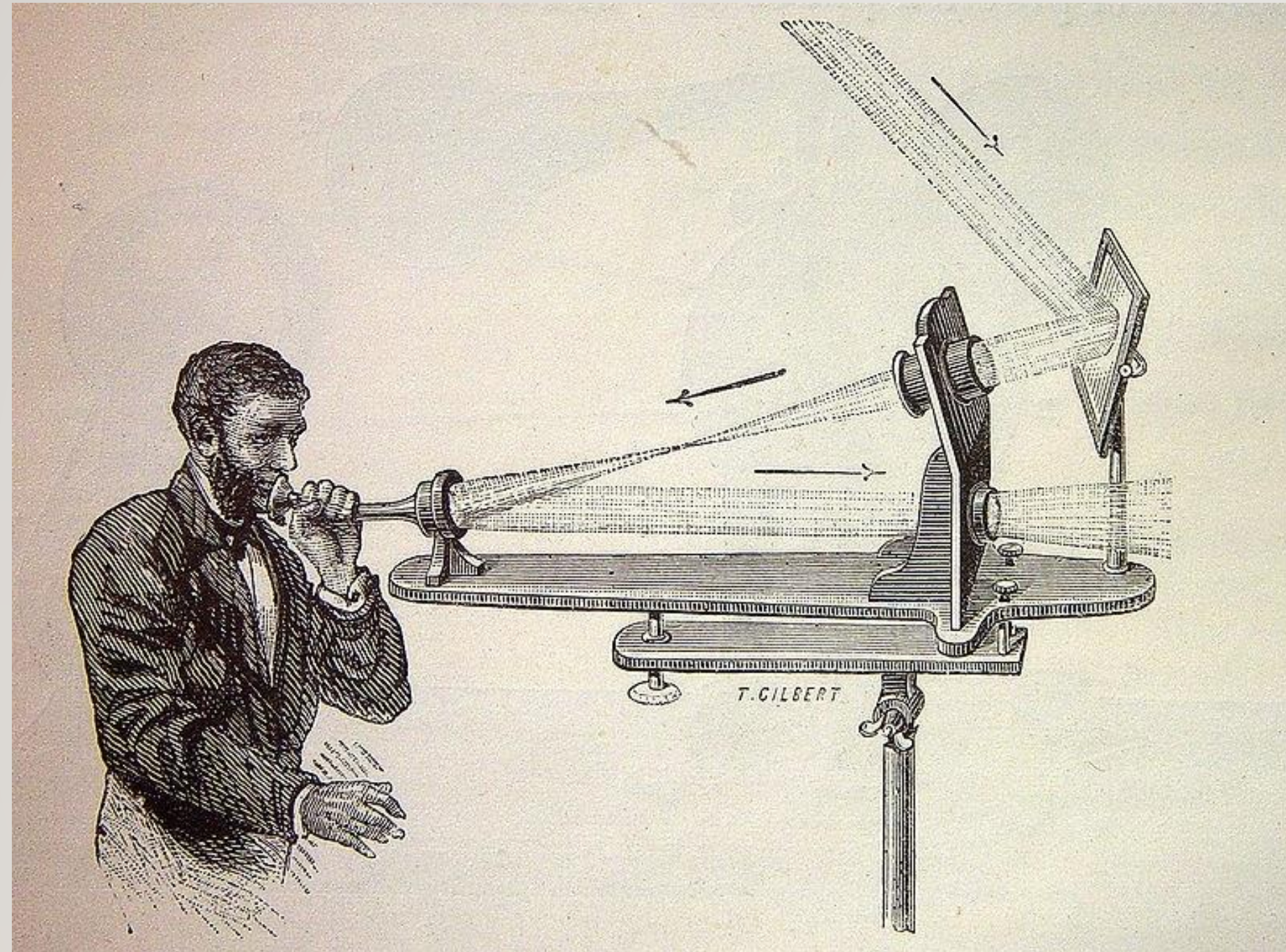
Sumber Referensi: https://i-fiberoptics.com/pdf/12_0120-if_514.pdf

<https://sharepoint.umich.edu/lisa/physics/demolab/SitePages/6A44.45%20-%20Total%20Internal%20Reflection%20-%20Water%20Stream.aspx>

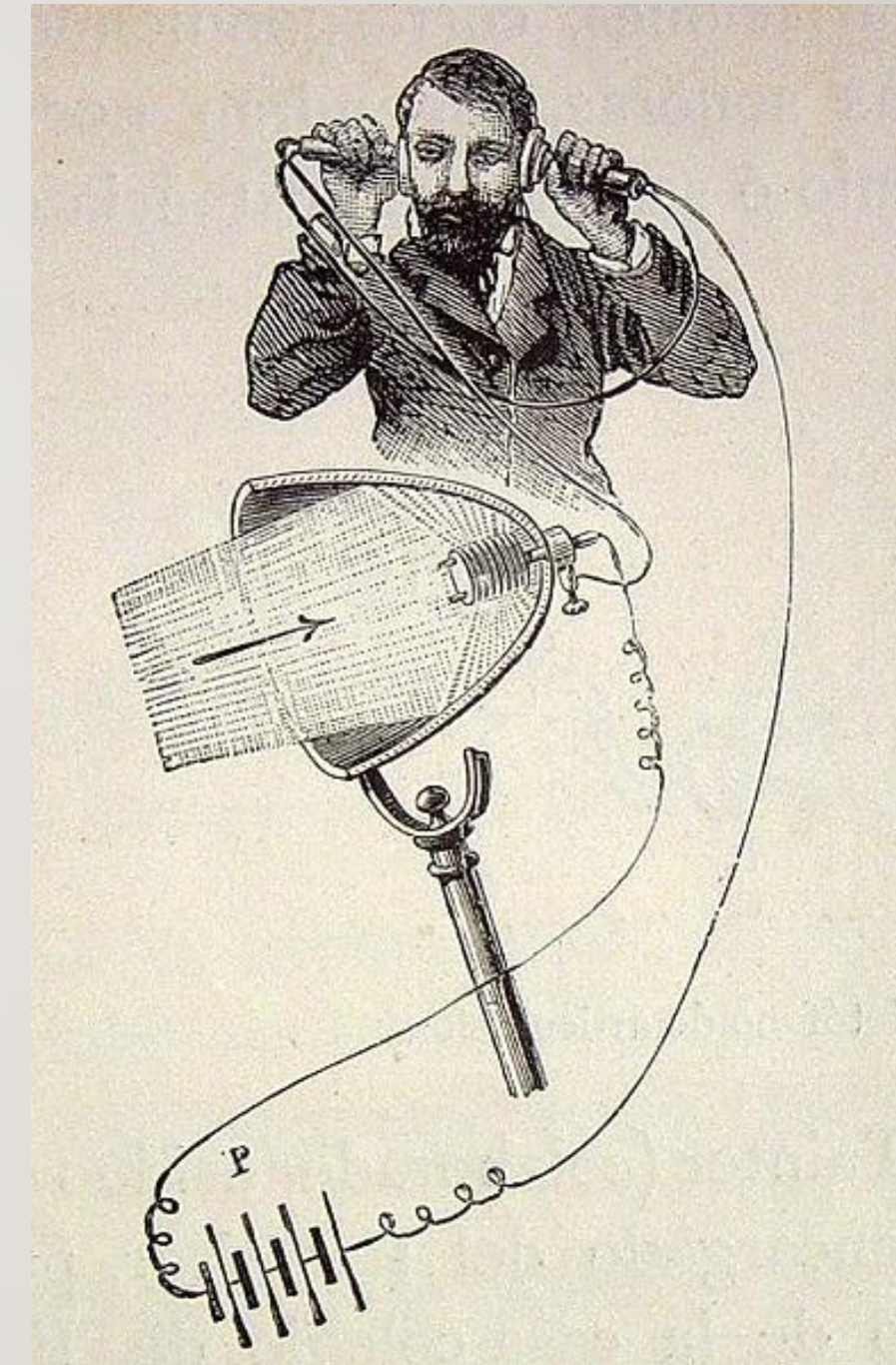
<https://philchatz.com/physics-book/contents/m42462.html>

1880 : Alexander Graham Bell

3



Ilustrasi photophone **transmitter**



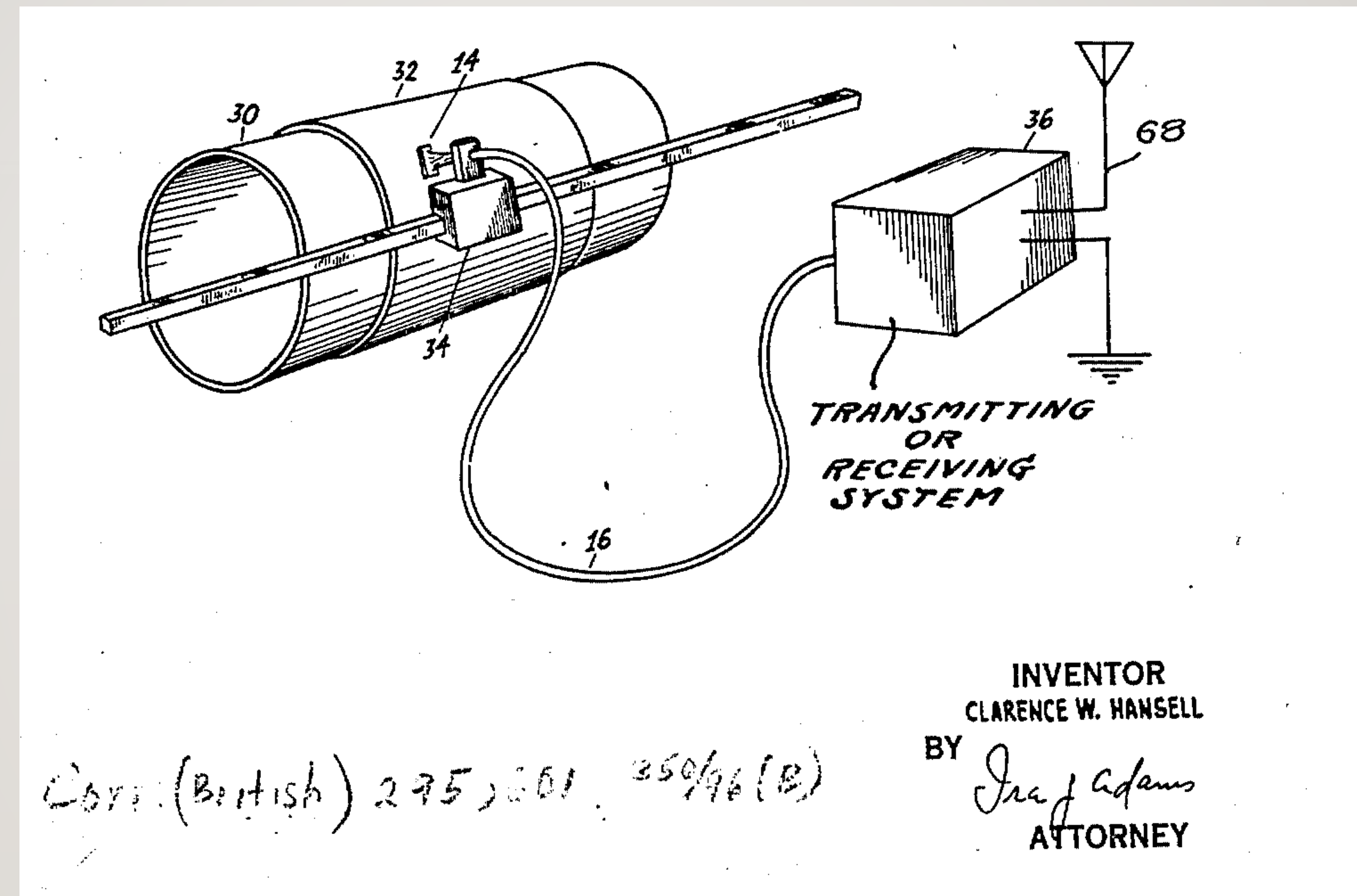
Ilustrasi photophone **receiver**

Gambar. Photophone

Sumber Referensi : <https://www.princeton.edu/ssp/joseph-henry-project/photophone/>
https://rimstar.org/science_electronics_projects/photophone_transmitting_sound_with_sunlight.htm

1920: C.Hansell dan J.L Baird

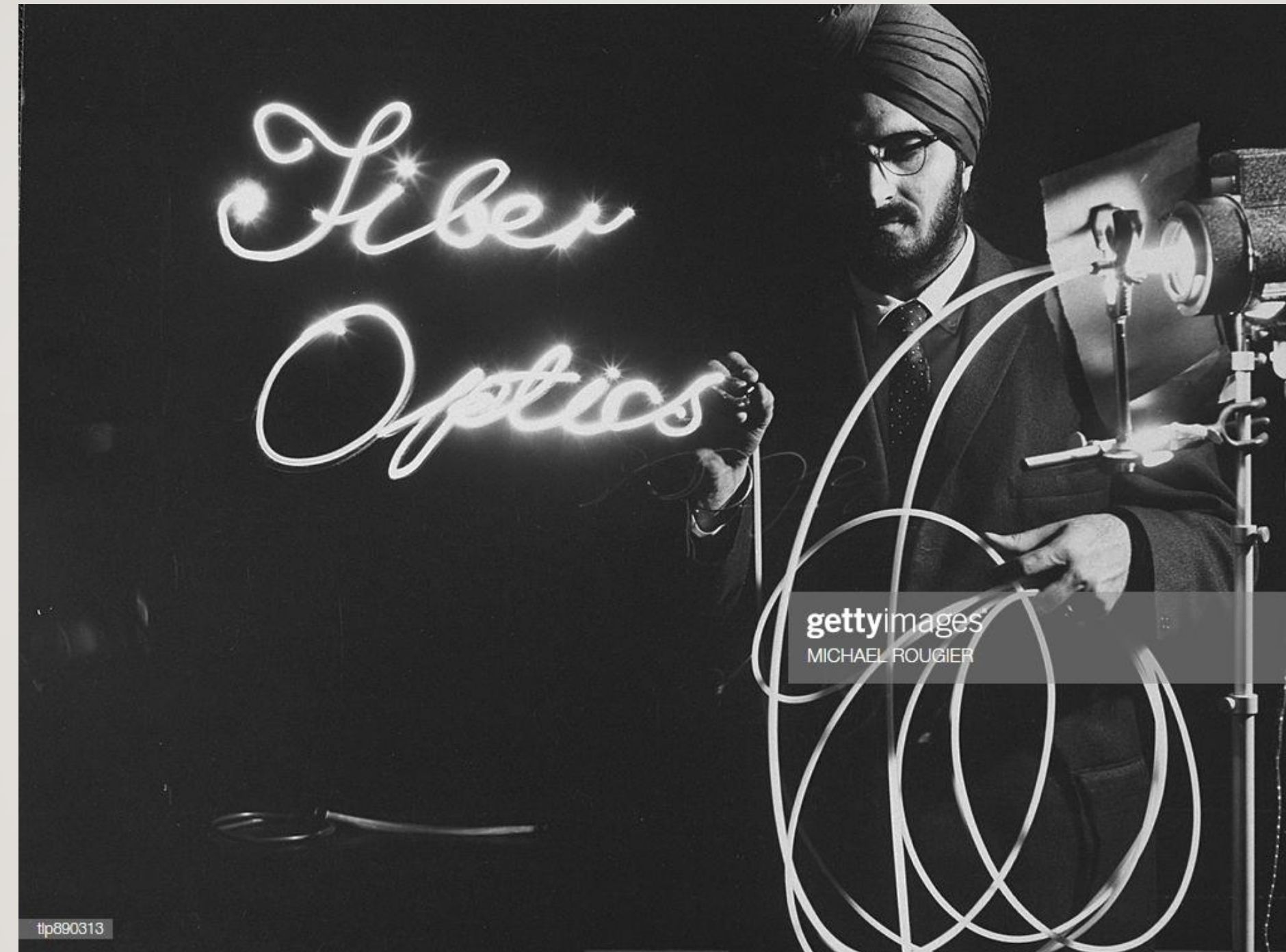
4



Gambar . Experiment C. Hansell

1952: Narinder Singh Kapany

5



Gambar. Experiment Narinder Singh Kapany

1954: Penemuan Serat Optik Modern

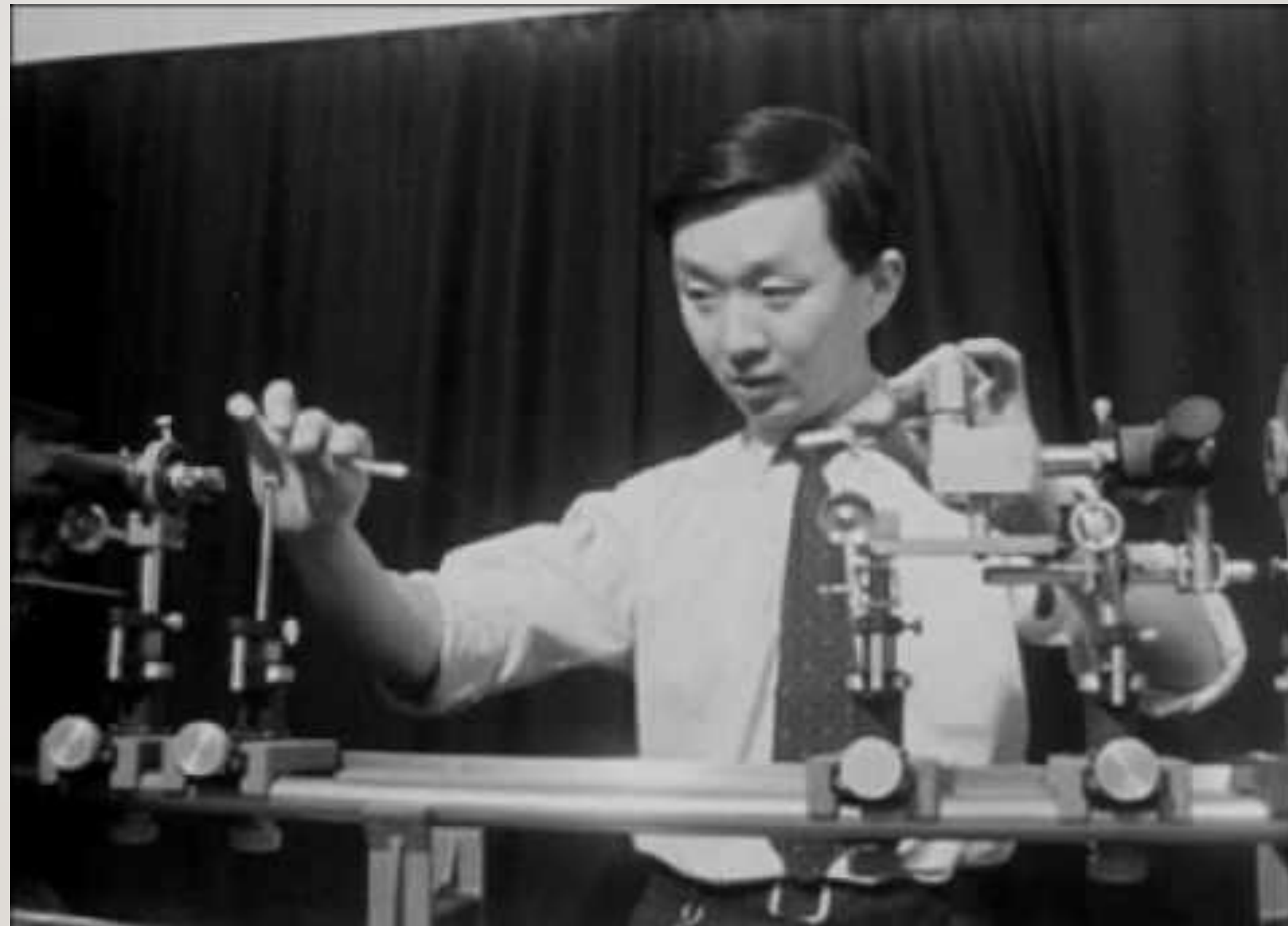
6

Abraham Van Heel



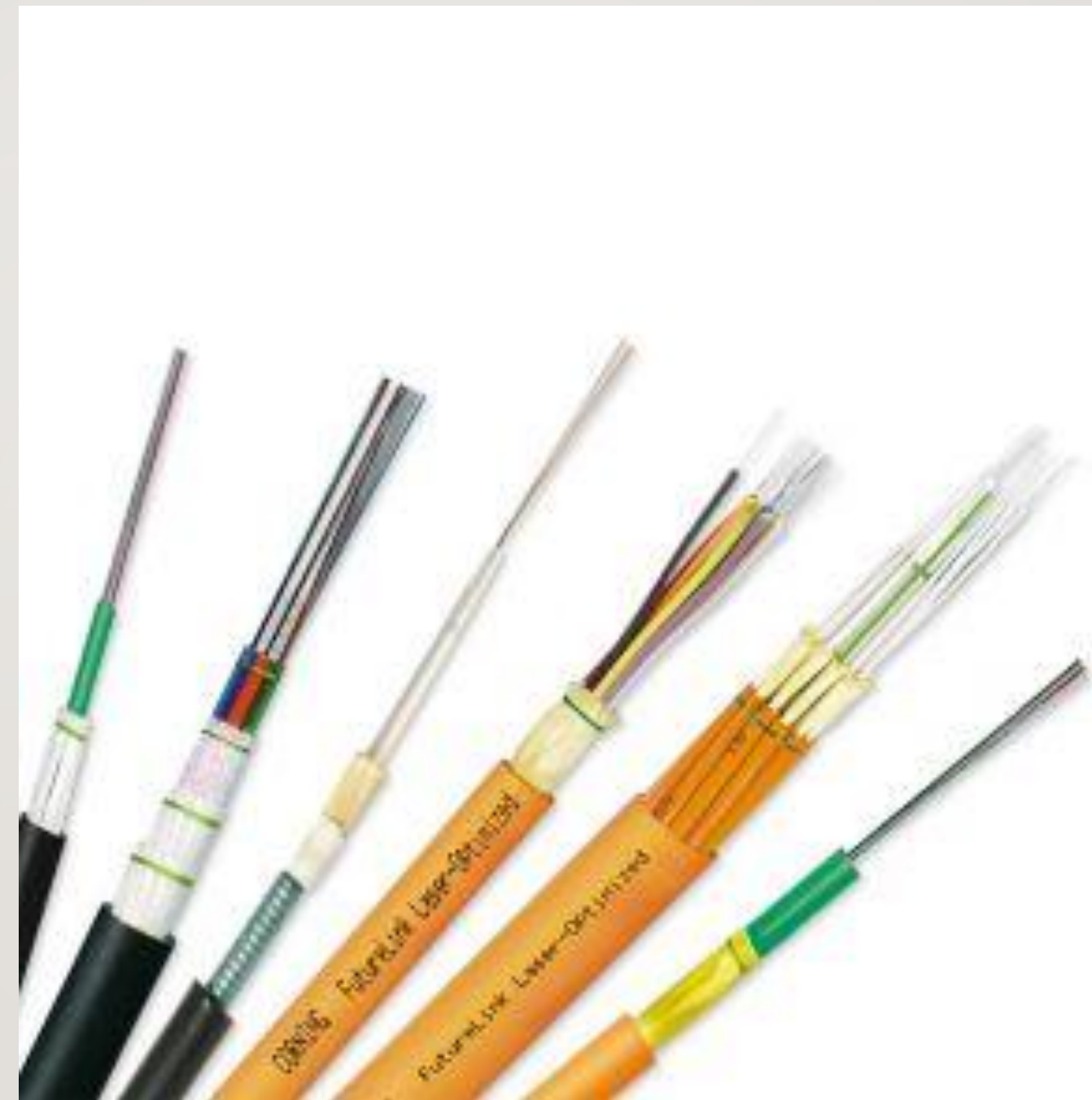
➔ **“Transparan Coating” = “CLADDING**

1966: *Charles K.Kao dan George Hockhman*



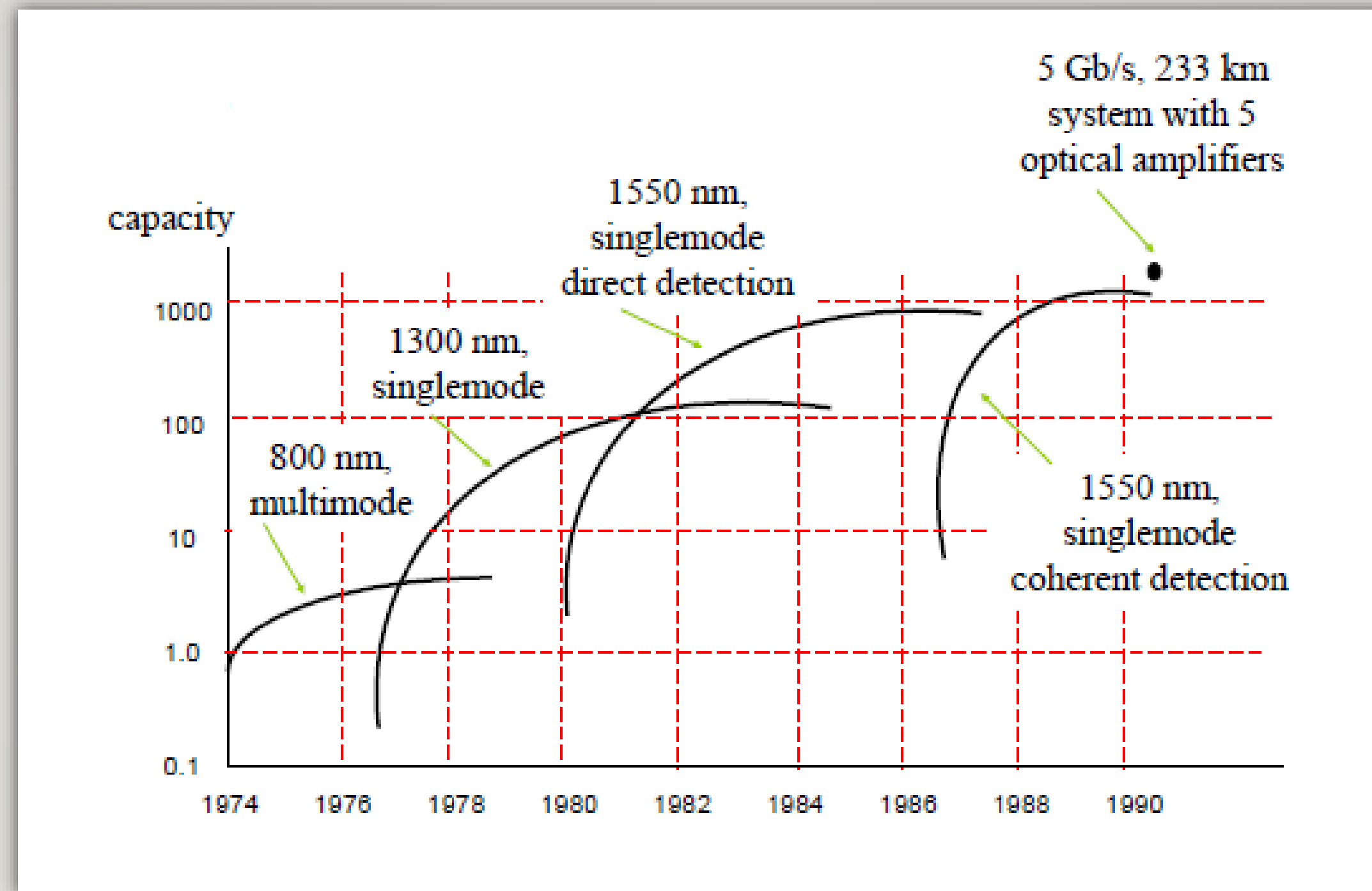
Gambar. Experiment Charles K.Kao

1970: Robert Maurer, Donald Keck, and Peter Schultz



Cont'd : EVOLUSI KOMUNIKASI OPTIK (4)

9



Gambar. Evolusi Serat Optik

Sumber Referensi:

PT. Telekomunikasi Indonesia Tbk, 2014, PI 1.1 - Dasar Sistem Komunikasi Optik-Optical Access Network



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