CLAIMS:

1. A system for capturing scene with the simultaneous use of invisible infrared light (IR) and visible light (VIS) ~~light~~ for alpha channel creation and relighting effects in movie post-production transmission, the system comprising ~~the subsystems of~~:
   - a ~~L~~lighting sub system;~~,~~
   - an ~~E~~electro-optical system for simultaneous acquisition of ~~the~~ video in VIS and invisible near infrared light (NIR);~~,~~ and
   - a ~~V~~video post-processing converter for generation of alpha channel from the NIR video signal to determine ~~perform determination~~ between ~~the~~ a foreground object and a background objects, wherein the foreground object is illuminated with a NIR light source, ~~and background.~~

   wherein the electro-optical system comprising at least one camera using at least one of a color filter array, at least one bandpass interference filter tuned to the wavelength at which NIR is emitted by the lighting sub system, and a hot mirror, to split VIS and NIR video signals.

2. The system of claim 1, wherein the video post-processing converter uses VIS images to obtain information for more precise alpha channel derivation.

3. The system of claim 1, wherein the lighting subsystem comprising: ~~of~~
   - at least one narrowband / monochromatic light sources in NIR of light spectrum; and
   - common studio lights, preferably fluorescent tubes, in VIS of the spectrum.

4. The system of claim 1, wherein the electro-optical system comprising of either:
   - at least two video acquisition units, wherein one unit, referred as a NIR camera, is with enhanced sensitivity to NIR spectra and second unit, referred as a VIS camera, for color RGB video acquisition;~~,~~

     ~~suitable~~ a color splitting system; and~~,~~

at least one ~~suitable~~ bandpass interference filter~~(s)~~ used in the NIR camera to select specific wavelength corresponding to the used NIR lighting,

or

- at least one camera with more than one image sensors comprising of a color splitting system (NIR/VIS), a common RGB image sensor, and an image sensor sensitive to NIR light at particular wavelength with ~~suitable~~ optical element ~~system(s)~~ to keep the focal length of the lens,

Or

- a ~~one~~ camera comprising a special designed image sensor that will have CFA (color filter array) with R, G, B and IR filters for a single-sensor camera configuration wherein the image sensor is either CFA (colour filter array) with R, G, B and IR filters or Foveon image sensor with the addition of layers of IR.

5. The system of claim 4~~1~~, wherein all the optical cameras have common optical axis, achieved by using ~~suitable~~ the optical element that splits the incoming light to the direction of the lenses of the cameras.

6. The system of claim ~~1~~5, wherein in the ~~suitable electro~~ optical element comprises the hot-mirror which is configure~~dation for~~ to 45 degrees to the incident rays ~~is used~~.