

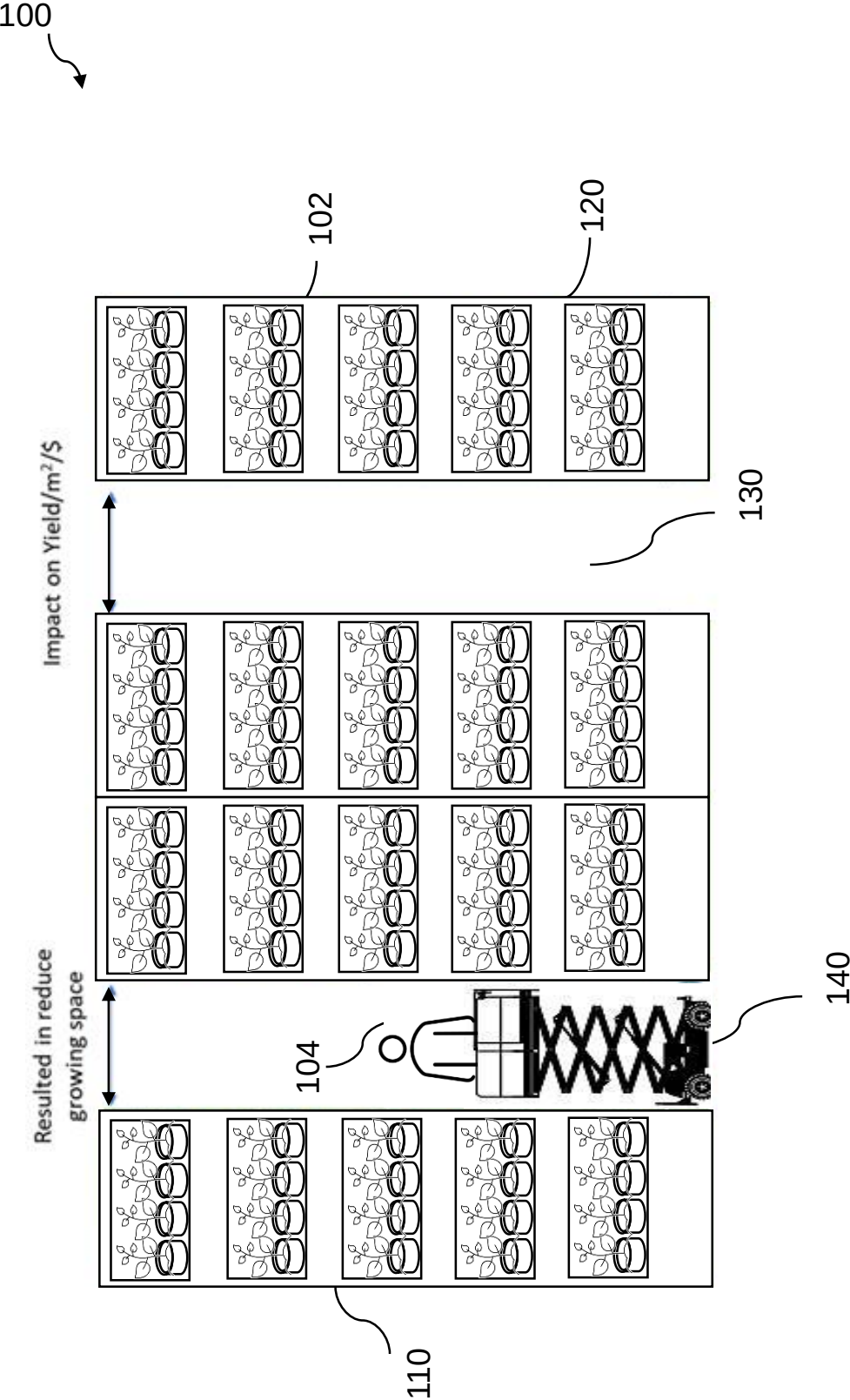


Fig. 1(a)

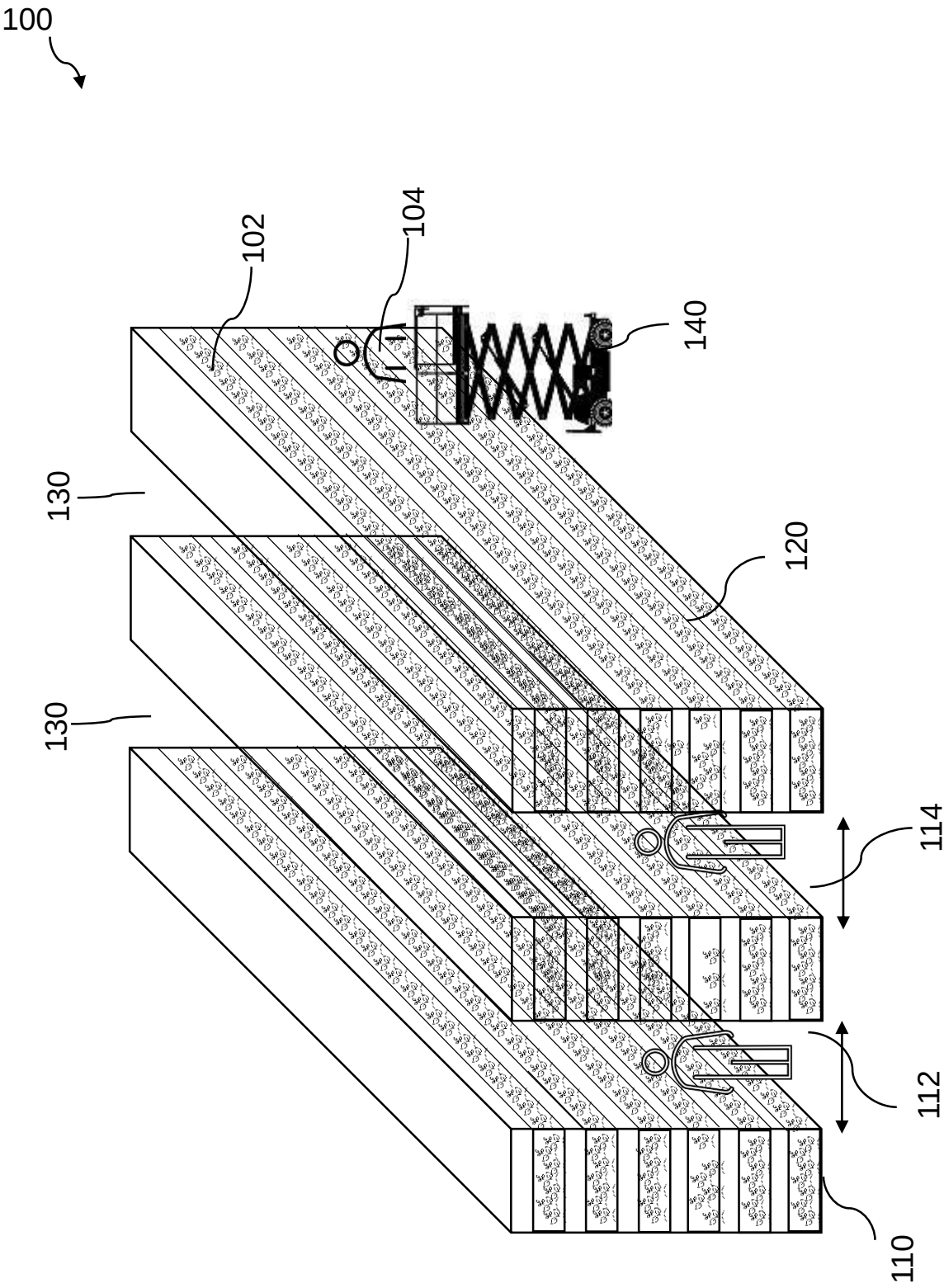


Fig. 1(b)

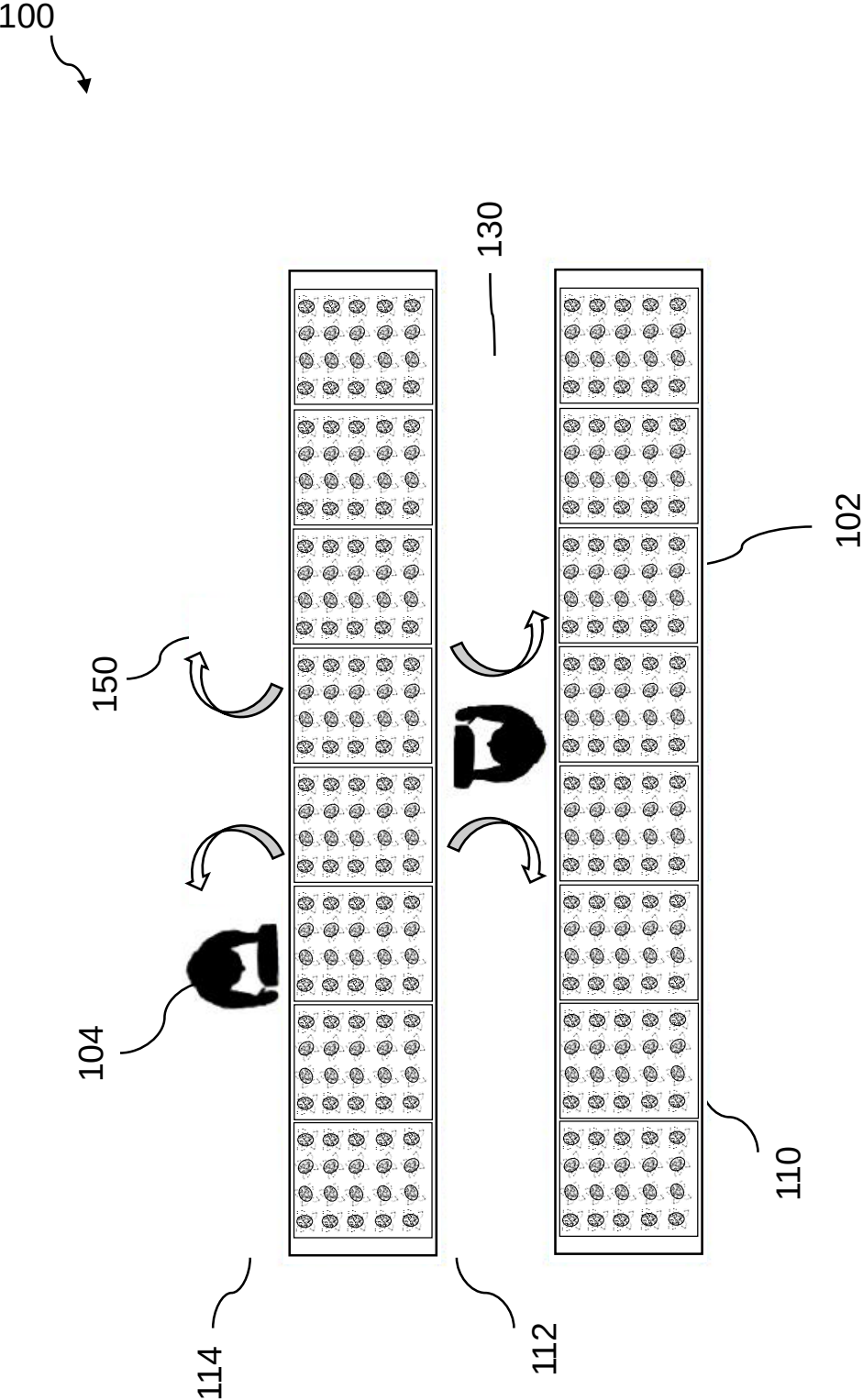


Fig. 2

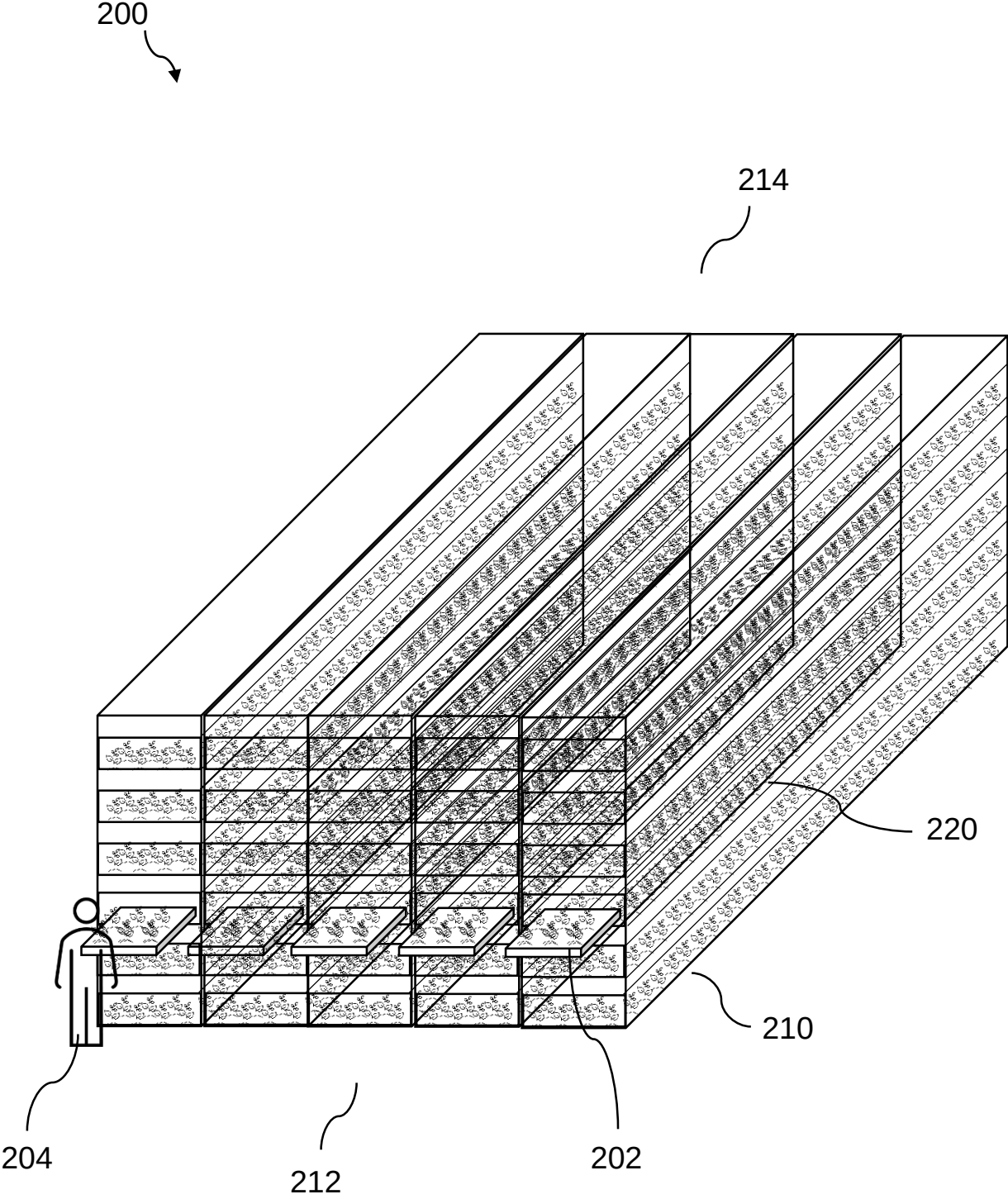


Fig. 3(a)

200



Fig. 3(b)

210

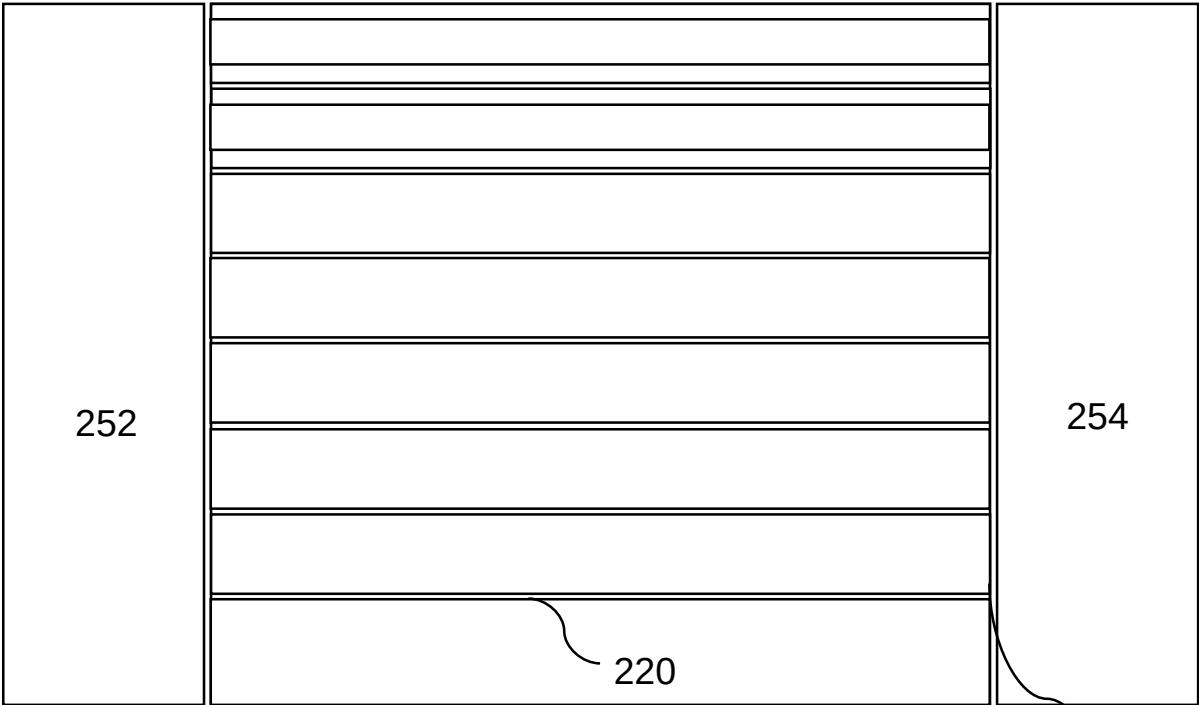


Fig. 3(c)

210

200

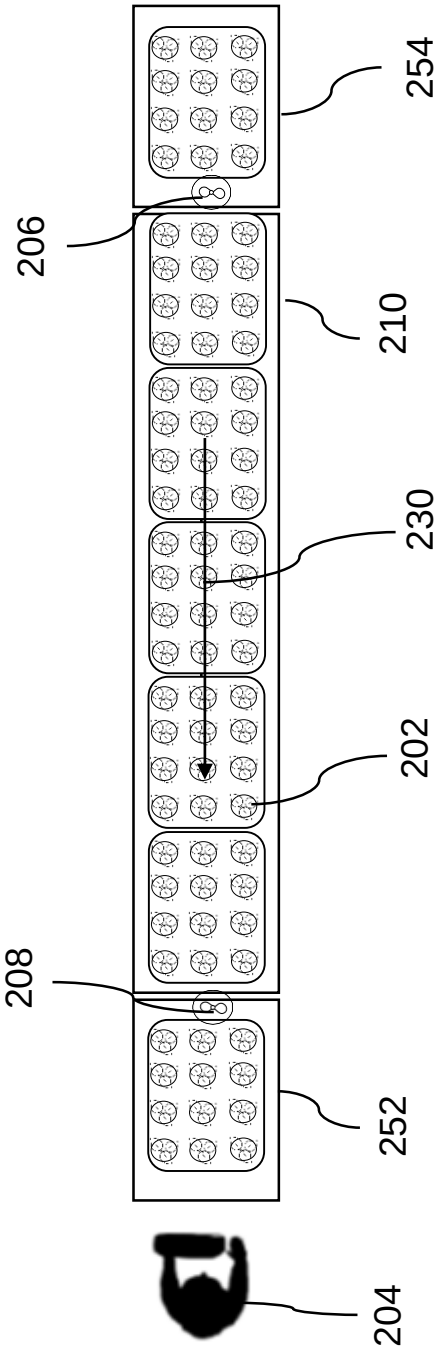


Fig. 4

200

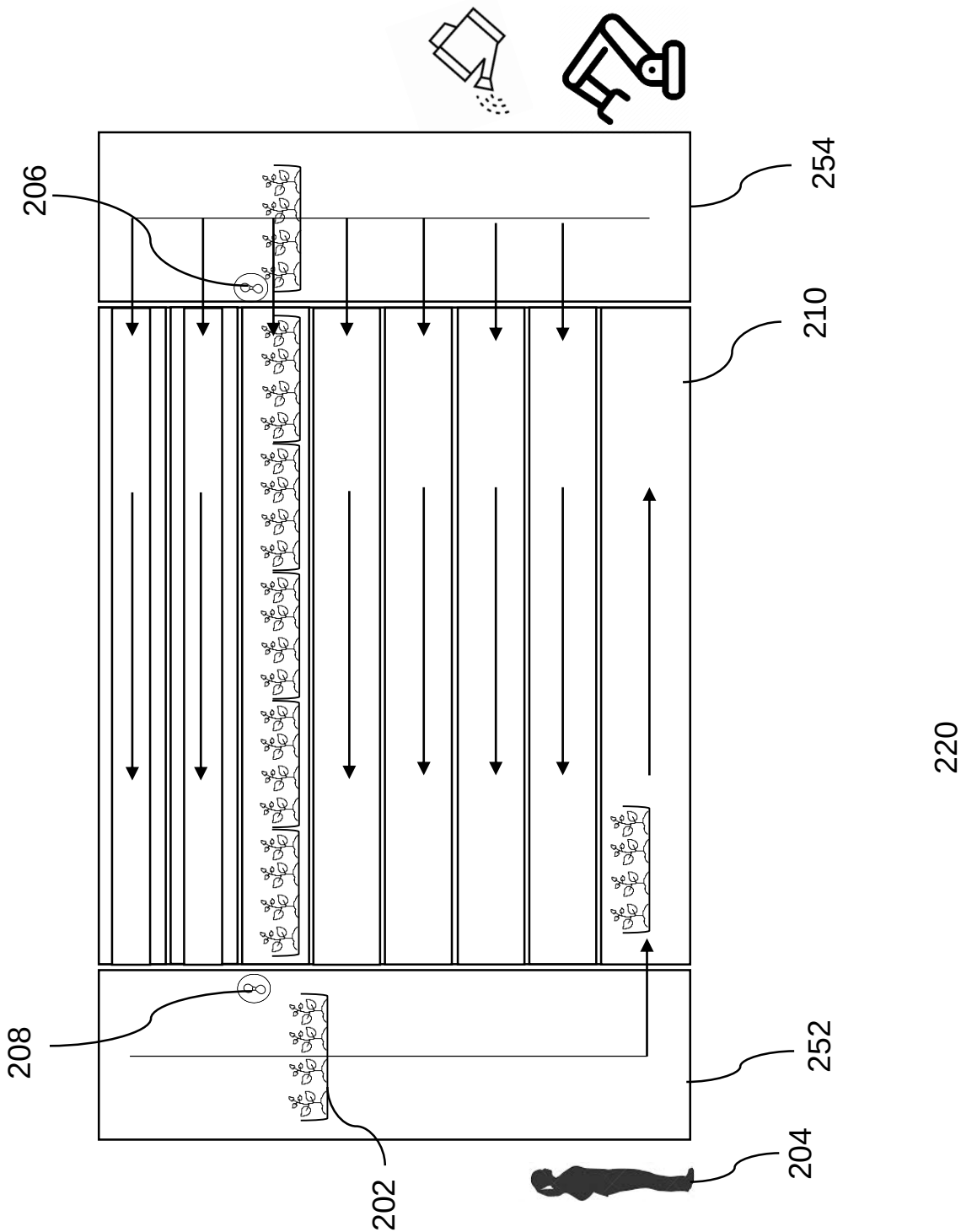
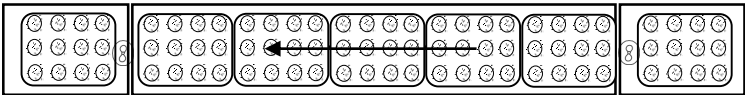


Fig. 5(a)

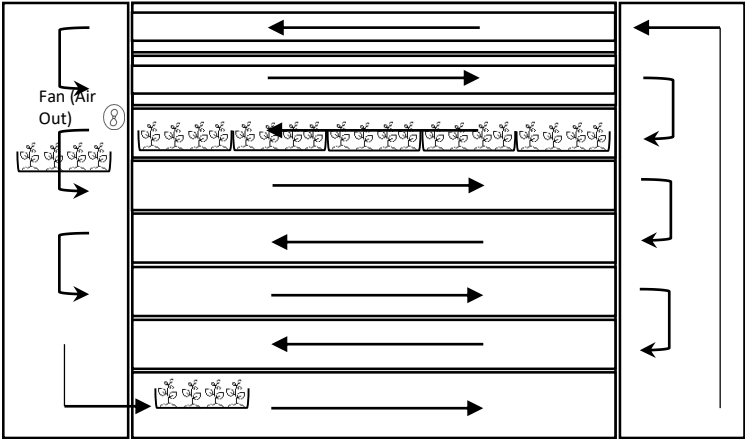
200



PLAN VIEW



FRONT VIEW



Tray Lifter cum pusher
(Tray Down)

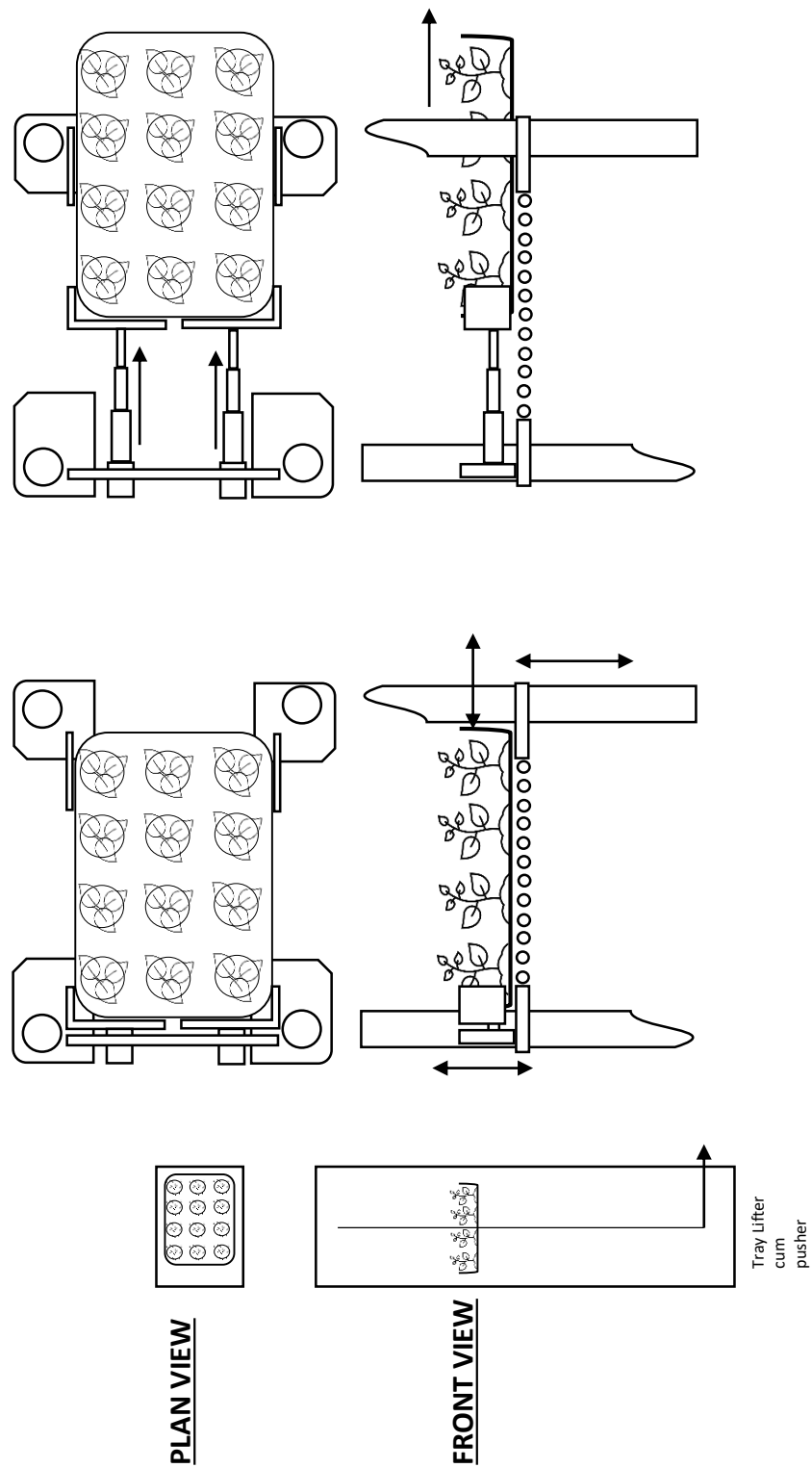
Tray Lifter cum pusher
(Tray Up)

Multi Level Rack
(with energy efficient and intelligent LED lighting control system. LED light can be sliding type for ease of replacement)

An additional figure to the vertical farming system 200

Fig. 5(b)

200



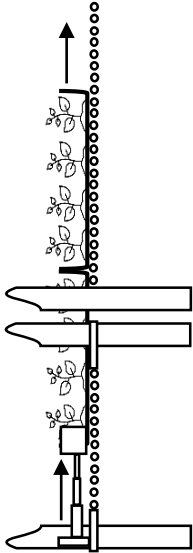
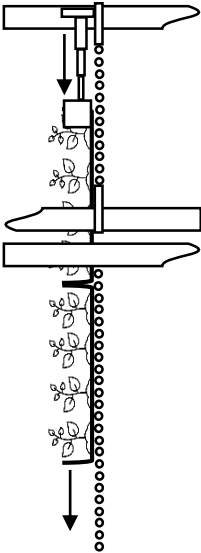
An additional figure to the vertical farming system 200

Fig. 5(c)

200

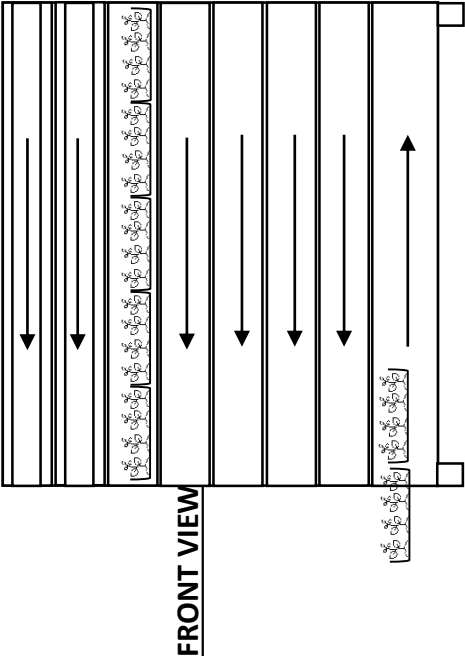
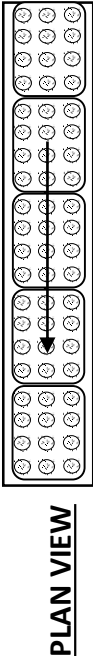
Free Roller / Gravity Roller (Non-motorised):
Energy saving & Maintenance free): Tray-push-
Tray concept.

Can be powered assist roller /belt /chain
(Motorised: For larger system)



Free Roller / Gravity Roller (Non-motorised):
Energy saving & Maintenance free): Tray-
push-Tray concept.

Can be powered assist roller /belt /chain
(Motorised: For larger system)

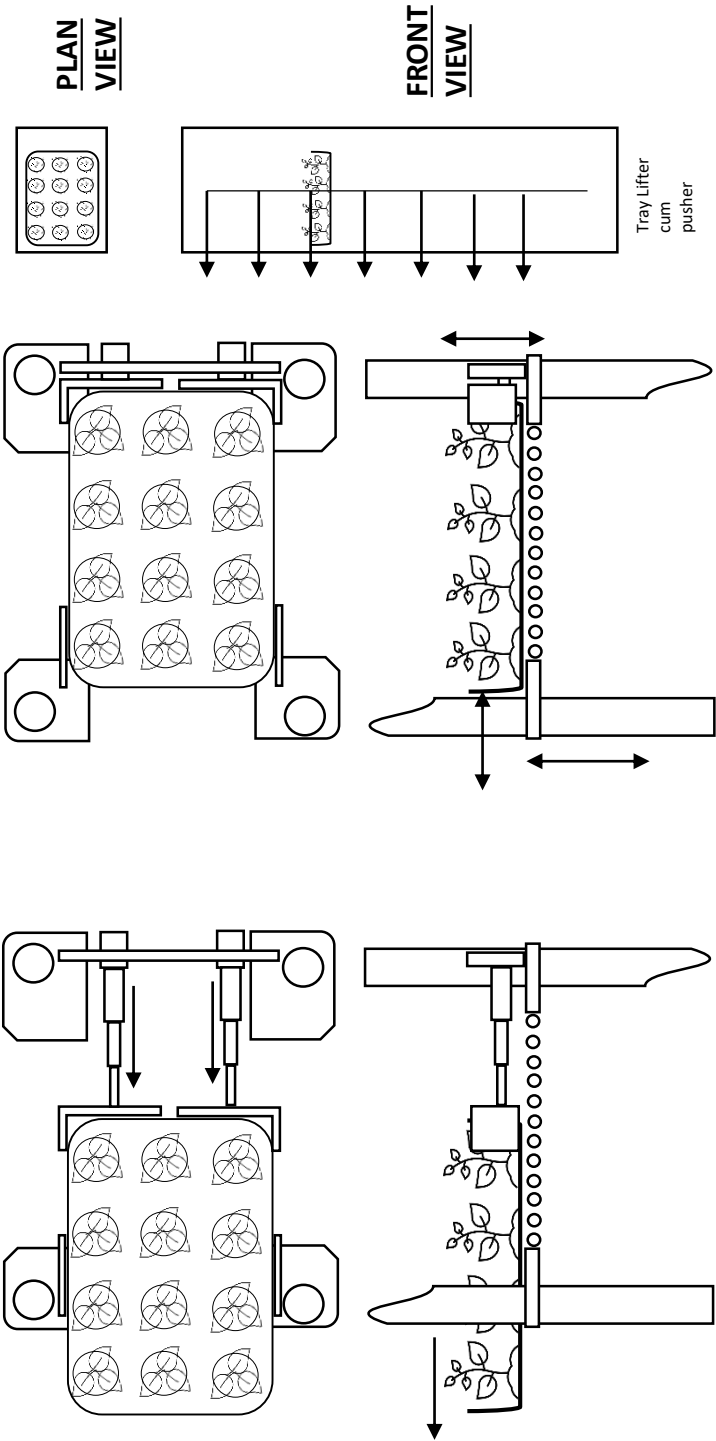


Multi Level Rack

An additional figure to the vertical farming system 200

Fig. 5(d)

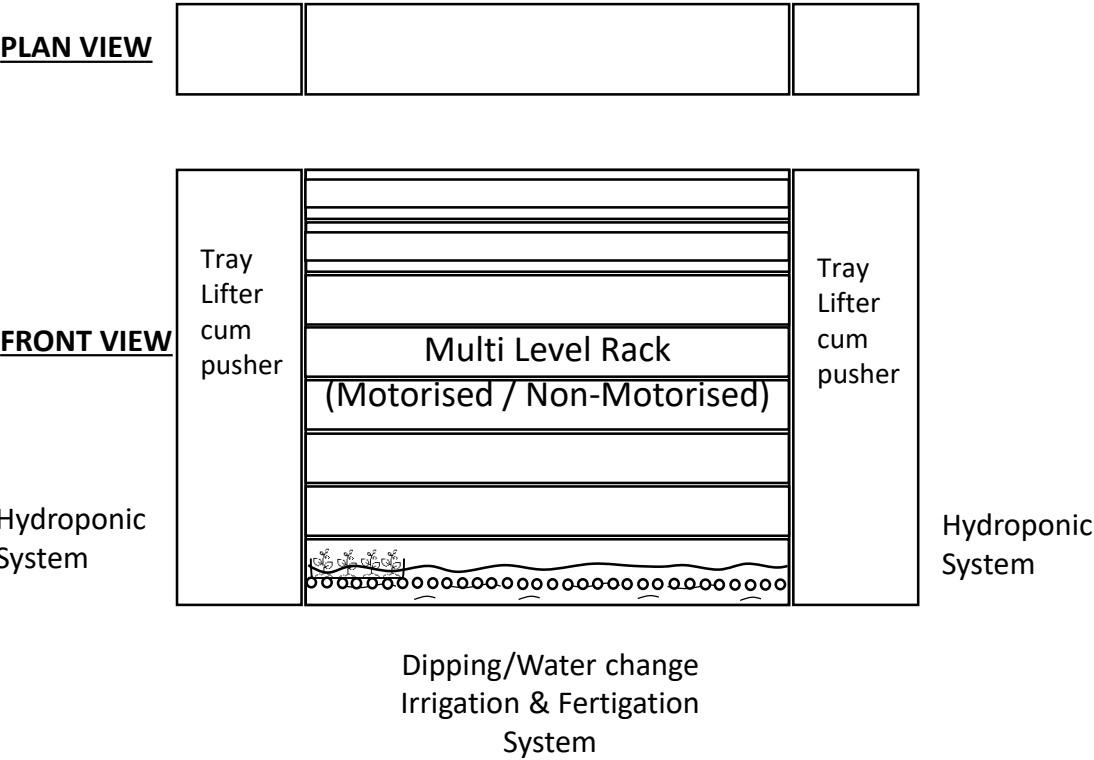
200



An additional figure to the vertical farming system 200

Fig. 5(e)

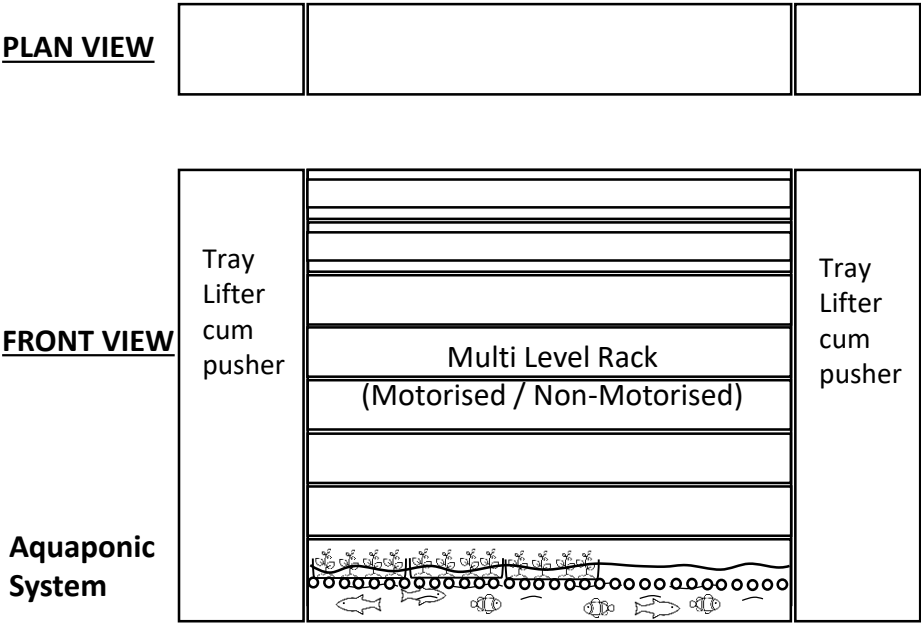
200
↙



An additional figure to the vertical farming system 200

Fig. 5(f)

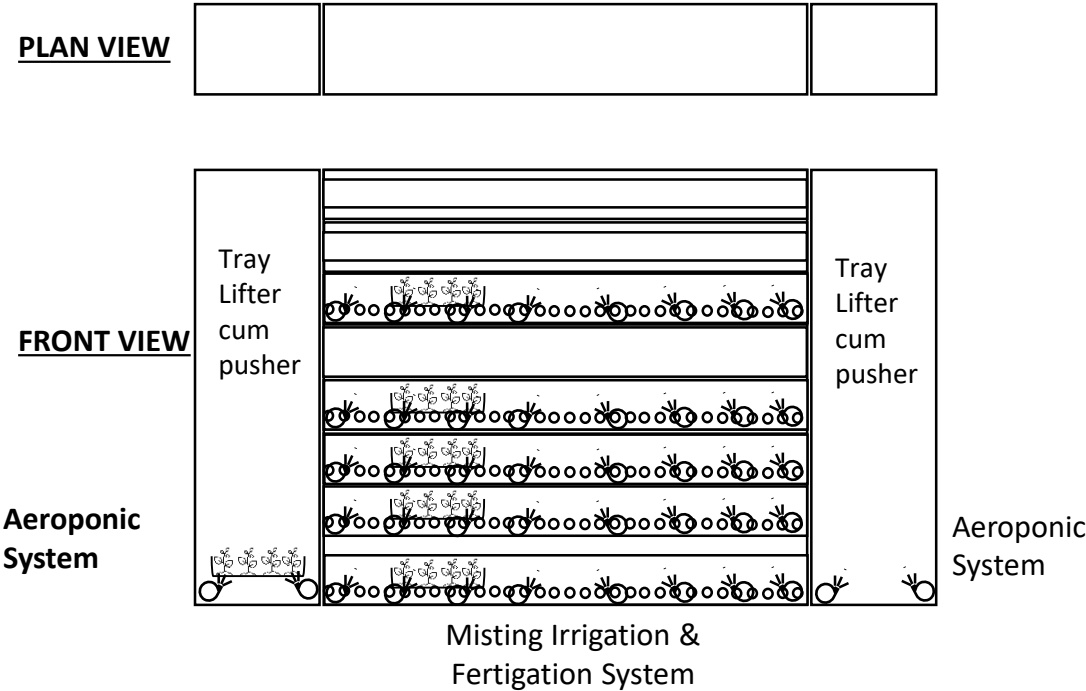
200
↘



An additional figure to the vertical farming system 200

Fig. 5(g)

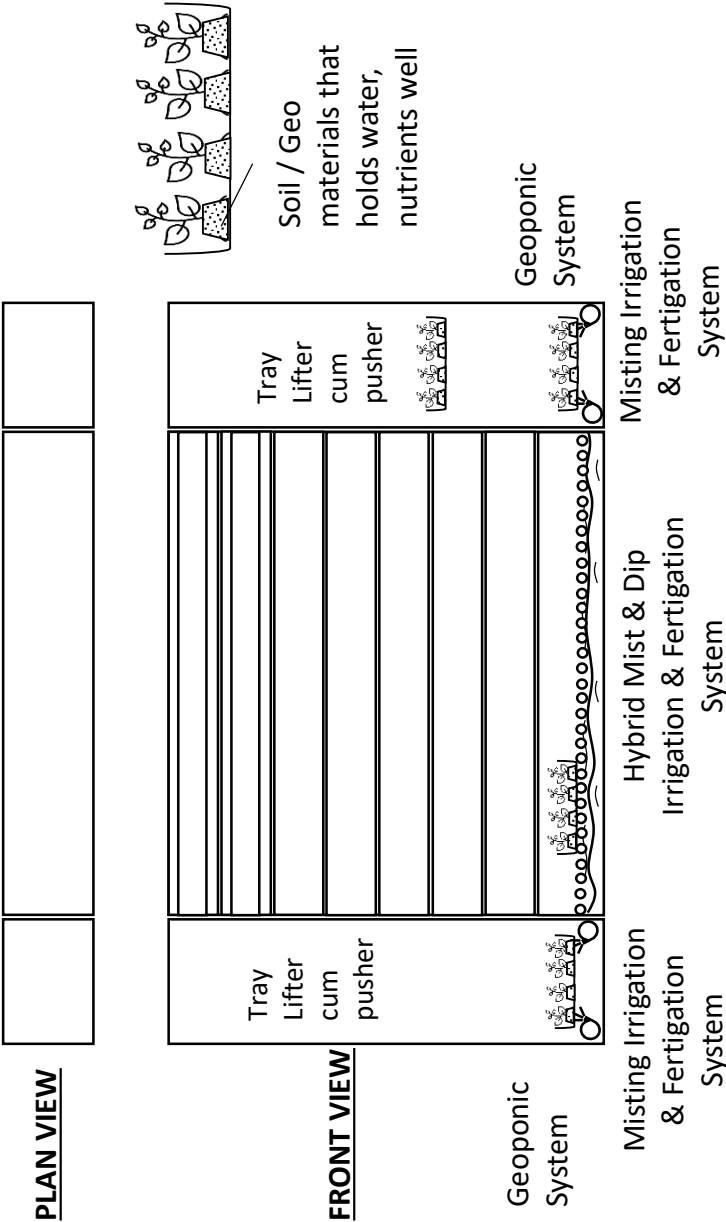
200
↘



An additional figure to the vertical farming system 200

Fig. 5(h)

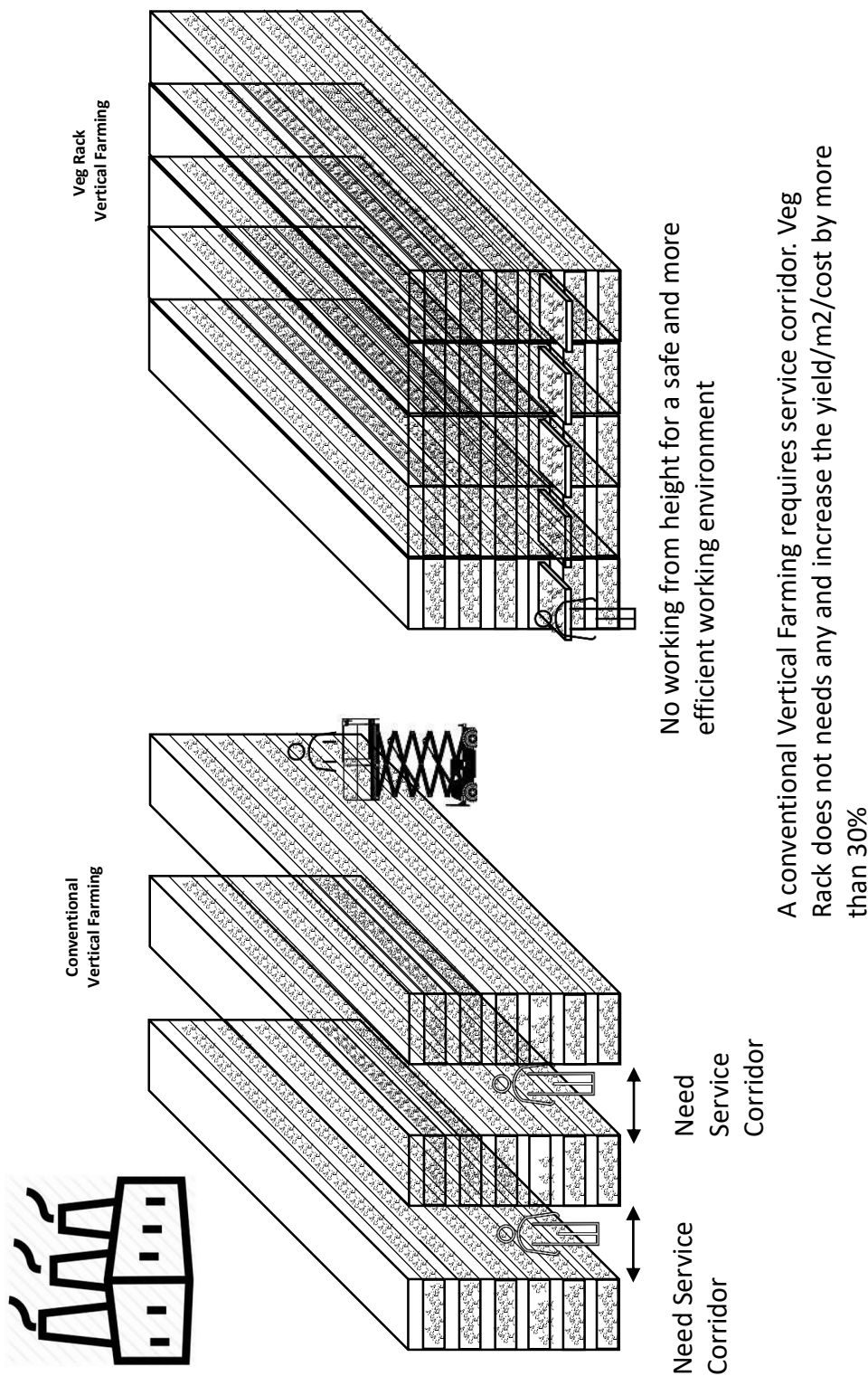
200



An additional figure to the vertical farming system 200

Fig. 5(i)

200

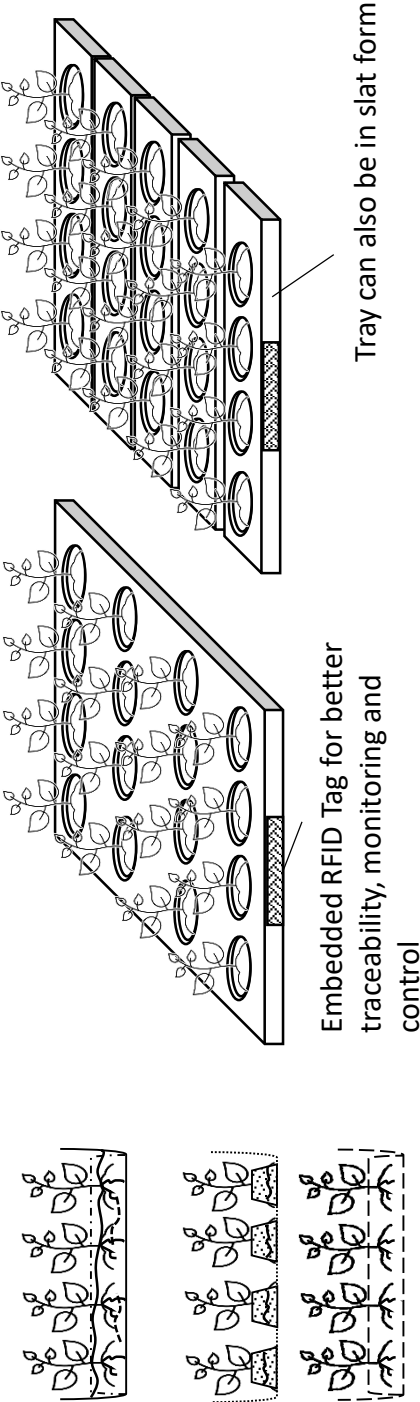


An additional figure to the vertical farming system 200

Fig. 5(j)

200

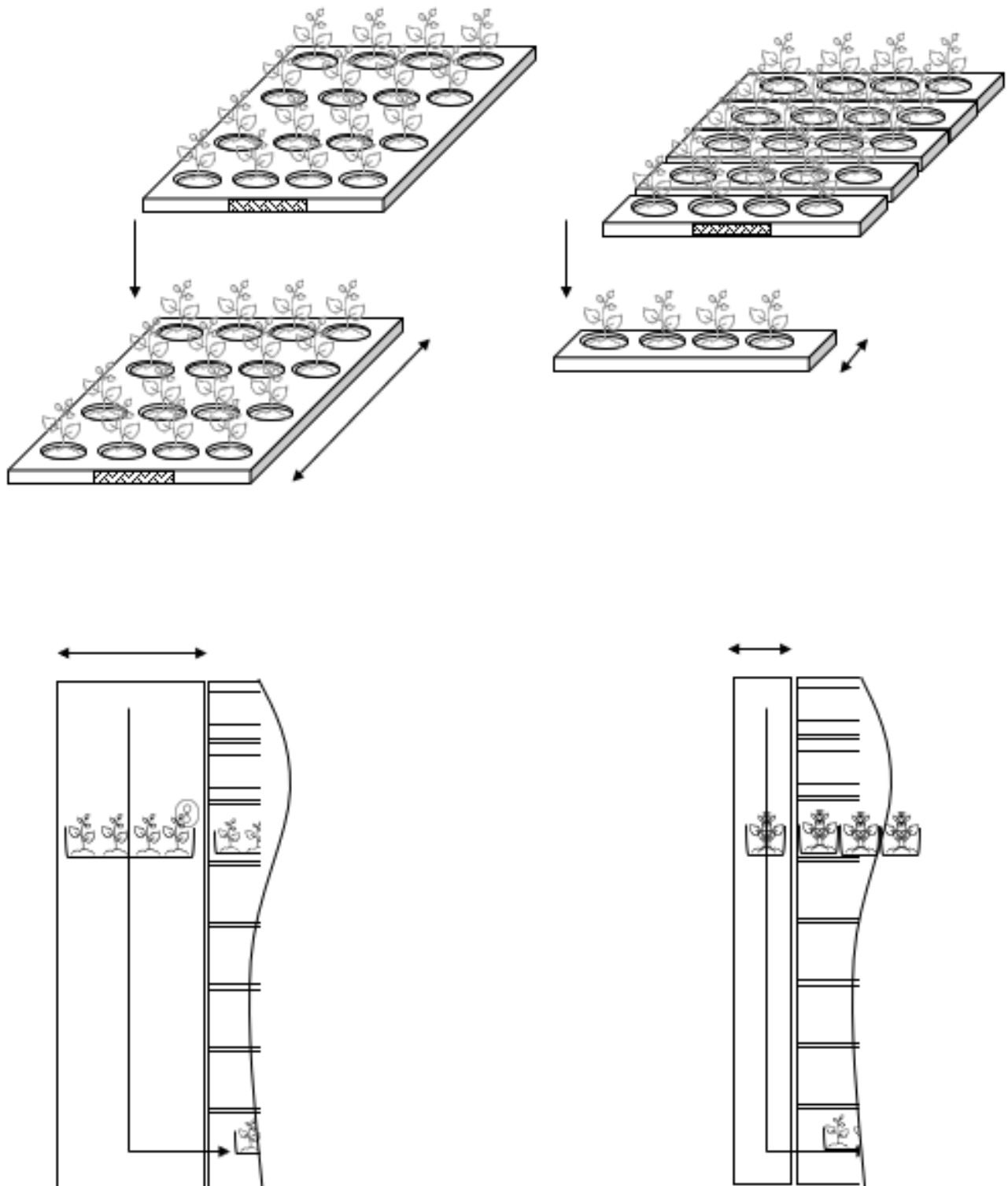
Tray Types/Designs for various growth methods (Hydroponic / Aeroponics / Aquaponics / Geoponics)



Note: Can be Barcode / QR code / Any identification system i.e. via vision optical character verification (OCV) and optical character recognition (OCR)

An additional figure to the vertical farming system 200

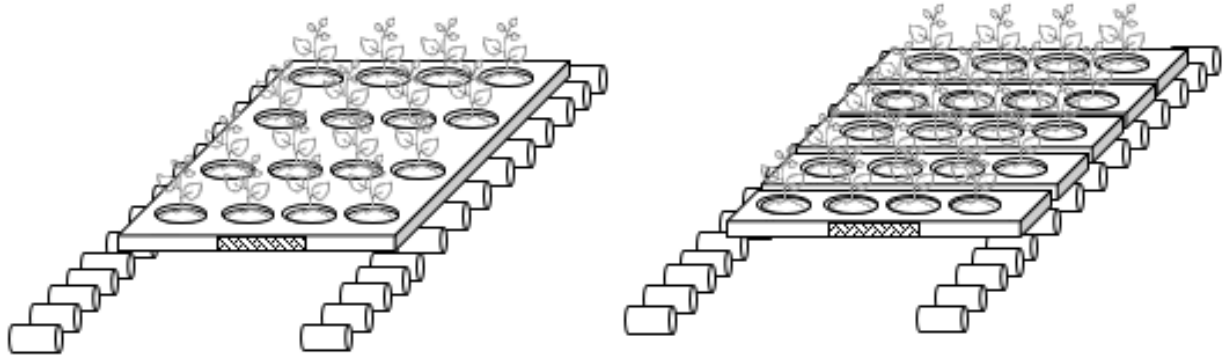
Fig. 5(k)



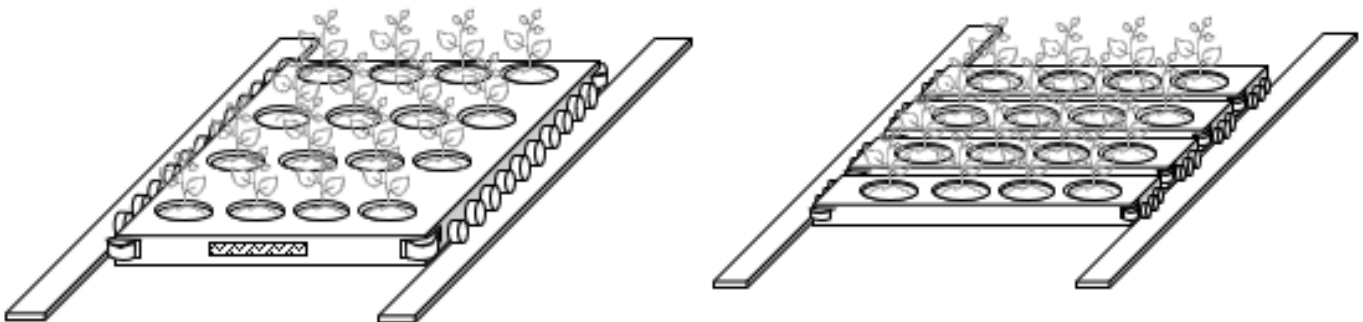
Full vs Slat Tray to reduce size of the vertical lifter at both ends

Fig. 5(I)

Rollers on Track Design (Less rollers used but tight maintenance)



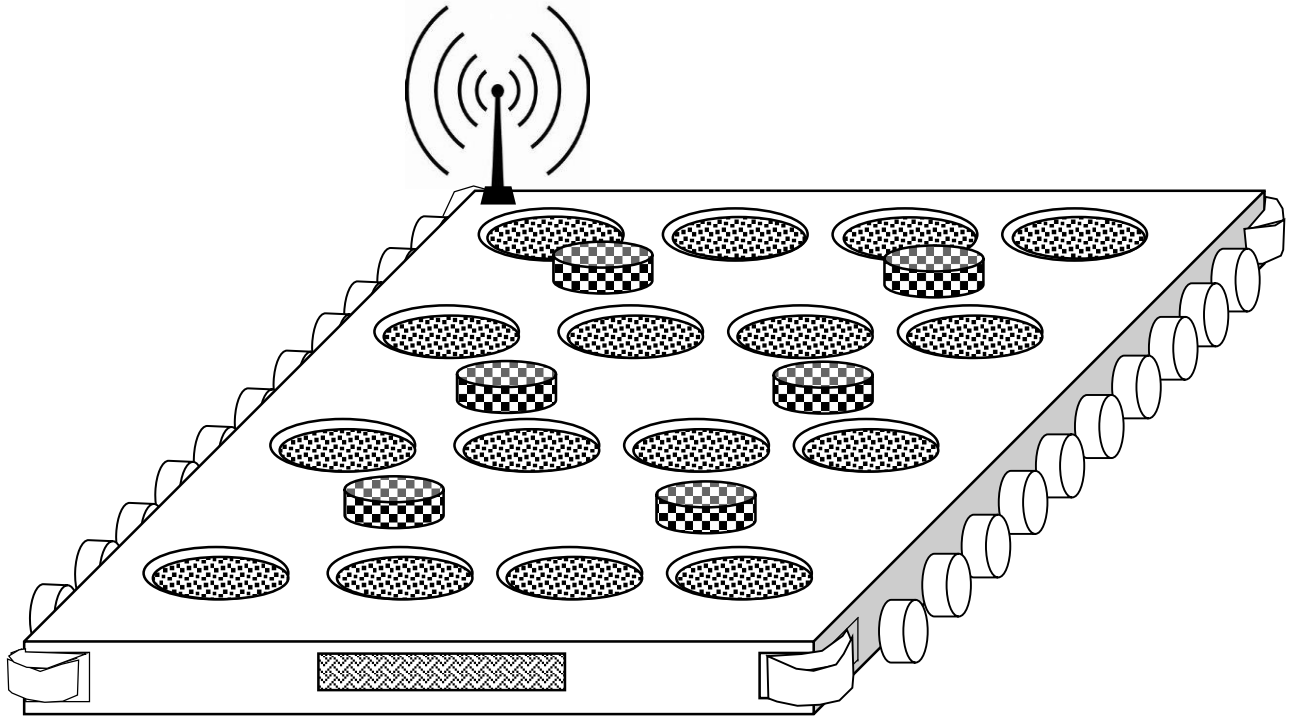
Rollers on Tray Design (More rollers but easier maintenance)



Rollers-On-Track & Rollers-On-Tray Designs

Fig. 5(m)

Mobile environment measurement and monitoring device



A single or multi mobile battery operated (with optional auto charging) trays mounted with advance environment measuring, monitoring and recording system can be deployed and travelling along the path into every layers of the racking to measure, collect, analyse and monitoring the lighting intensive (also correct wavelength), humidity, temperature, CO₂, irrigation uniformity, including A.I. vision camera, etc. to monitor the growth health of every plot of vegetable without the needs for human intervention. Data can also be wirelessly transmitted or harvest at the loading station. Beside growth health it can also predict and check for any possible diseases in the plant or lack of nutrients in any of the plant such that immediate remedies action can be taken.

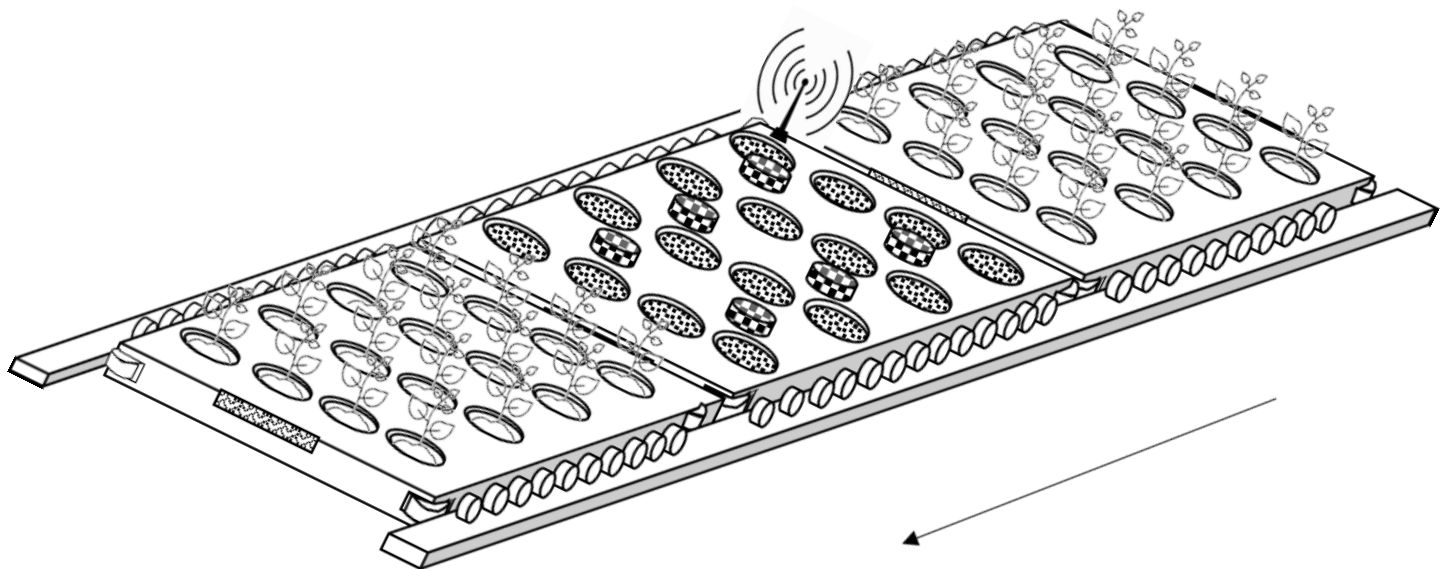
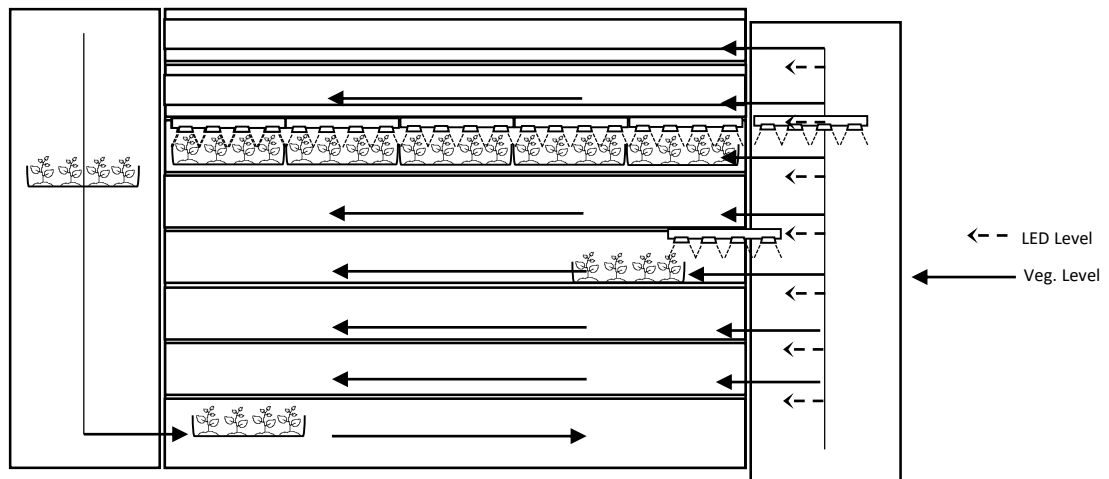


Fig. 5(n)



The vertical lifter beside moving plots of vegetable trays around the system, it is able to service and move the trays of LED lights via programming for the lifter to travel to and align with the height of the LED tray level. In this manner, defective LED lights can be replaced easily.

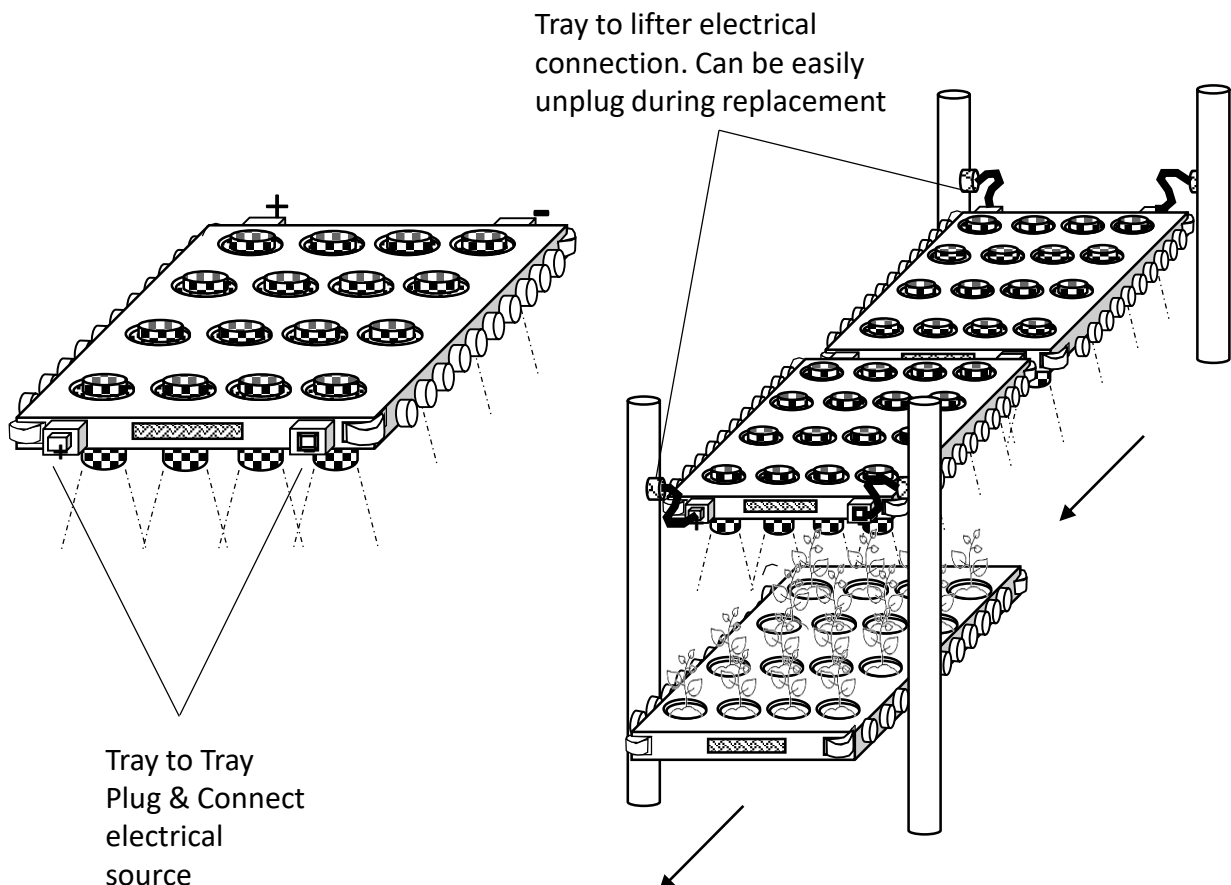


Fig. 5(o)

Similar to an additional LED level. An automatic misting or irrigation level maybe added to the racking system. It can be designed either to spray directly to the roots above or directly to the plant below. It is a self-propelled batter operated module.

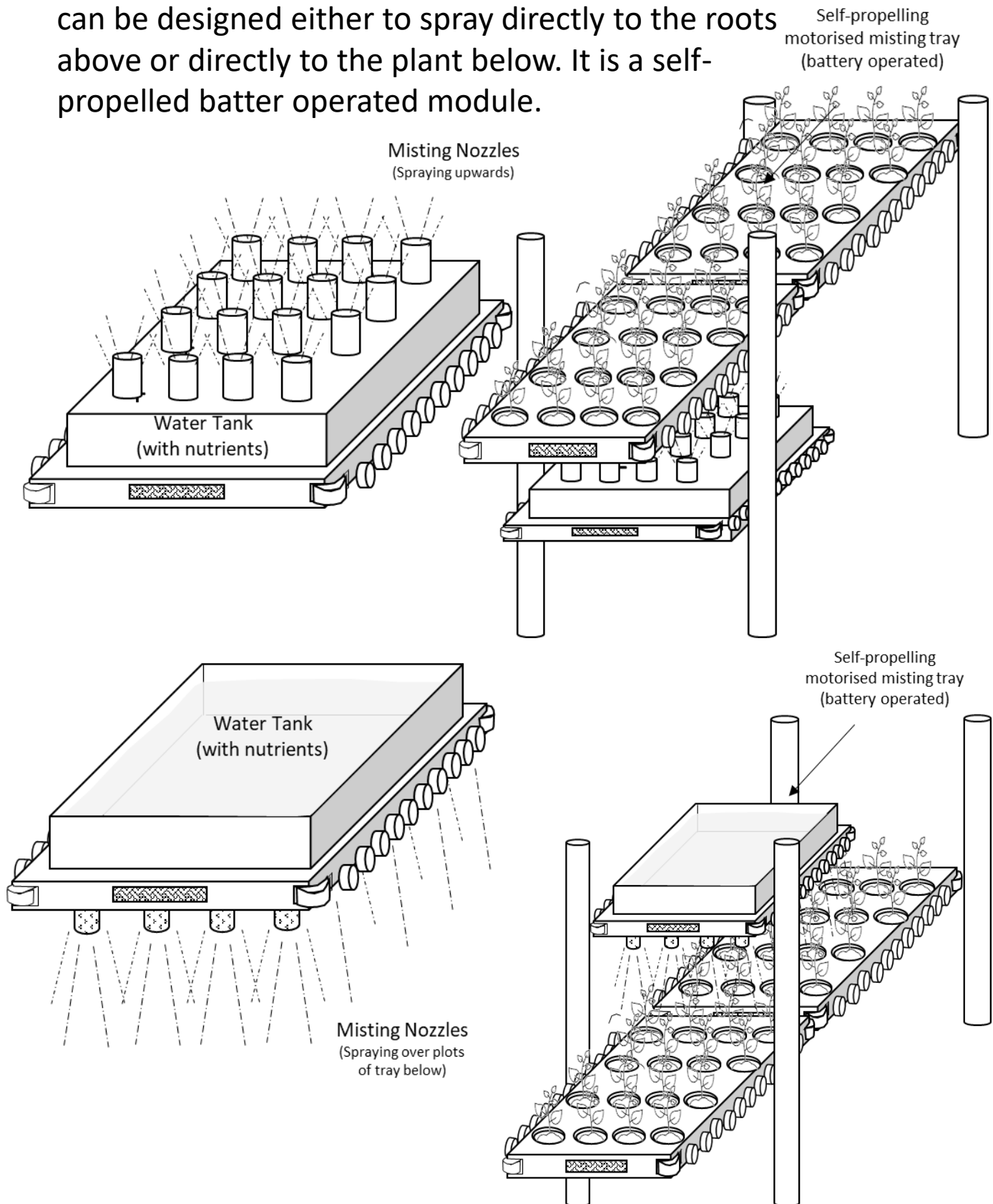
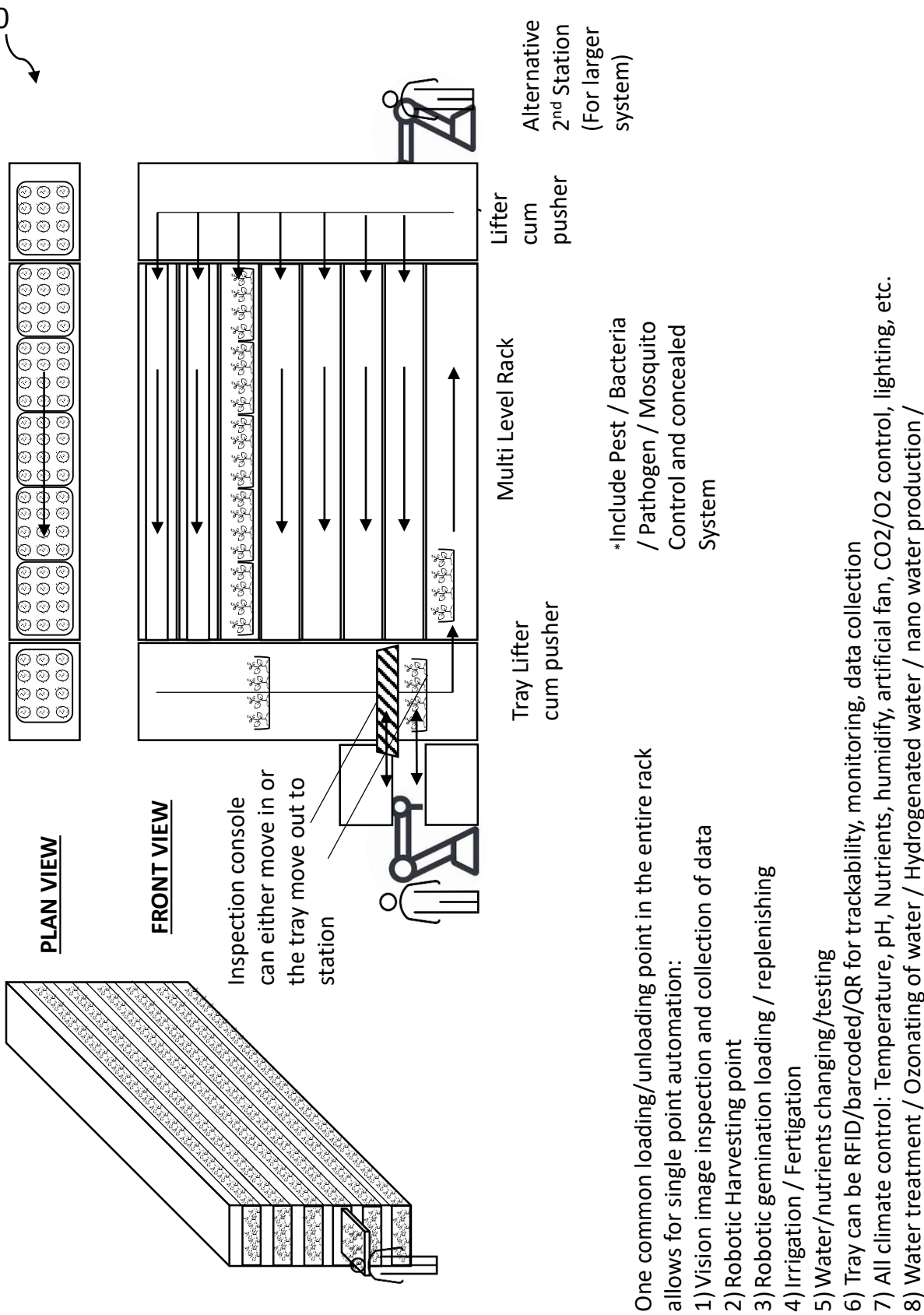


Fig. 5(p)

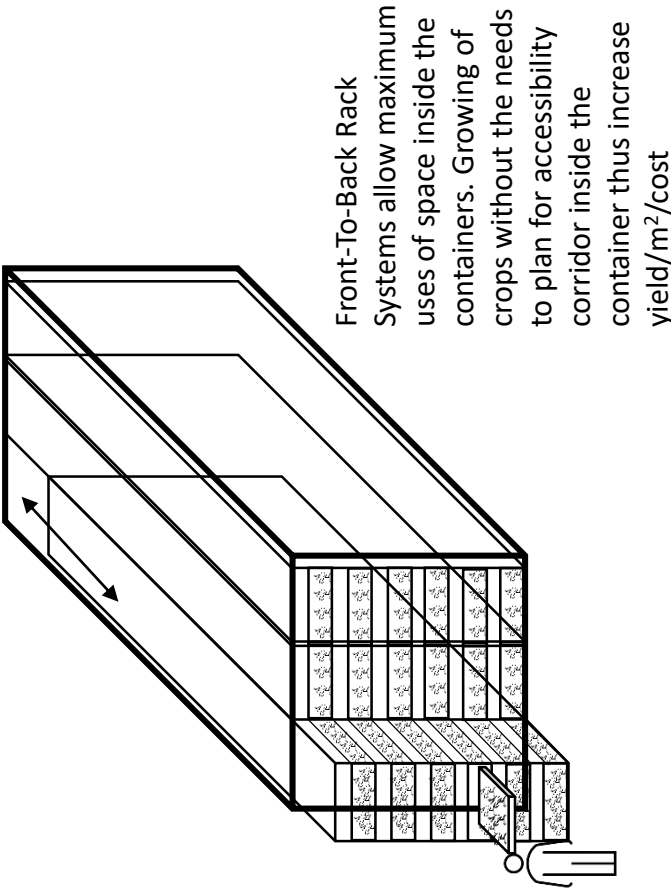
200



An additional figure to the vertical farming system 200

Fig. 5(q)

200

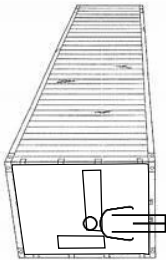
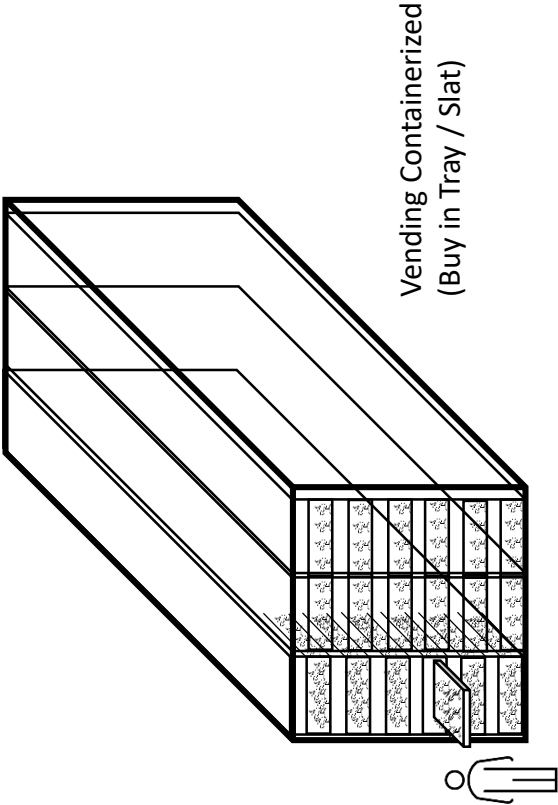


Can be inserted directly
inside a 20ft / 40ft /
high-roof container

An additional figure to the vertical farming system 200

Fig. 5(r)

200

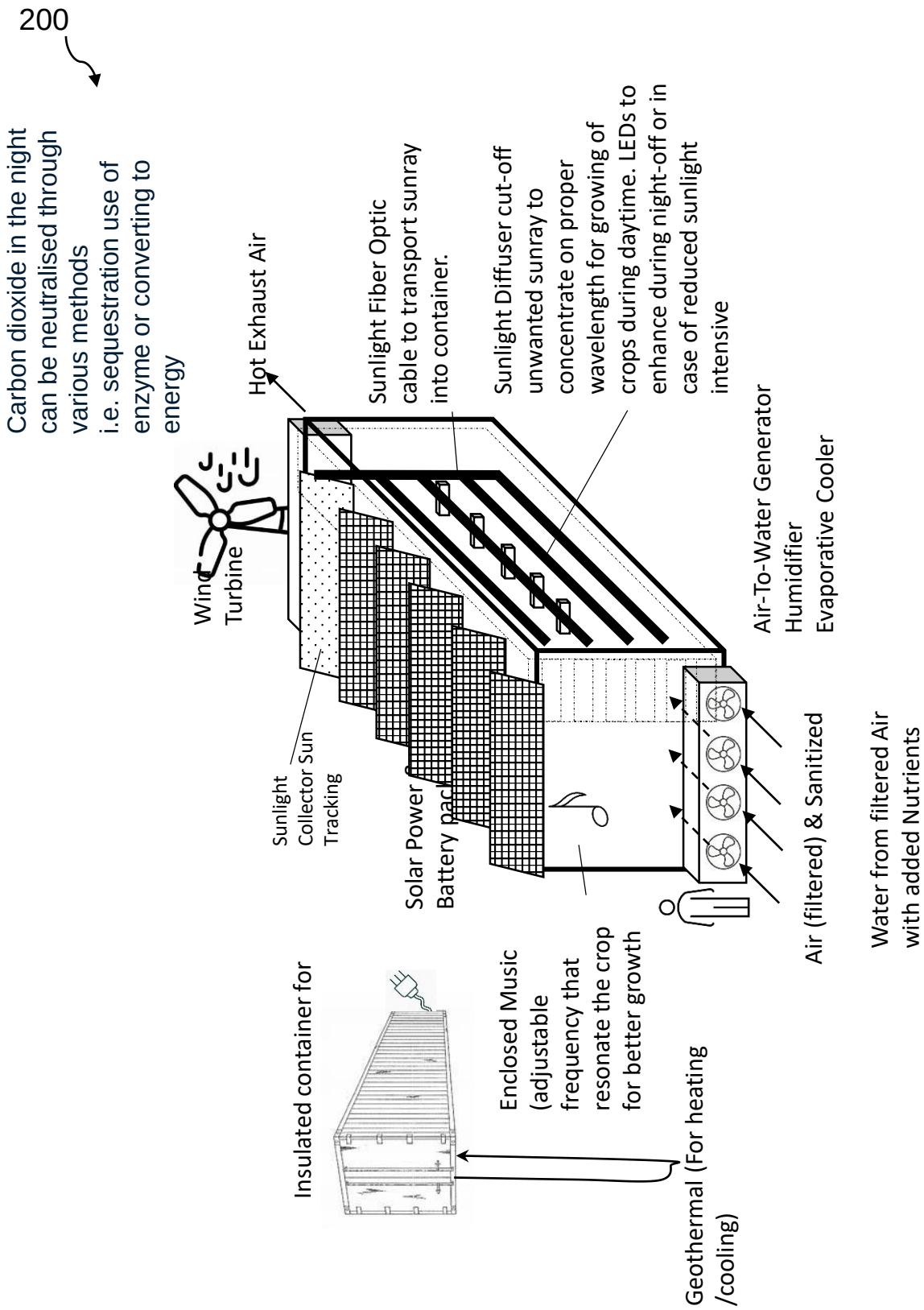


- Allow Apps selection, Ordering
Payment and Delivery Rider
pickup / self-harvesting



An additional figure to the vertical farming system 200

Fig. 5(s)



An additional figure to the vertical farming system 200

Fig. 6

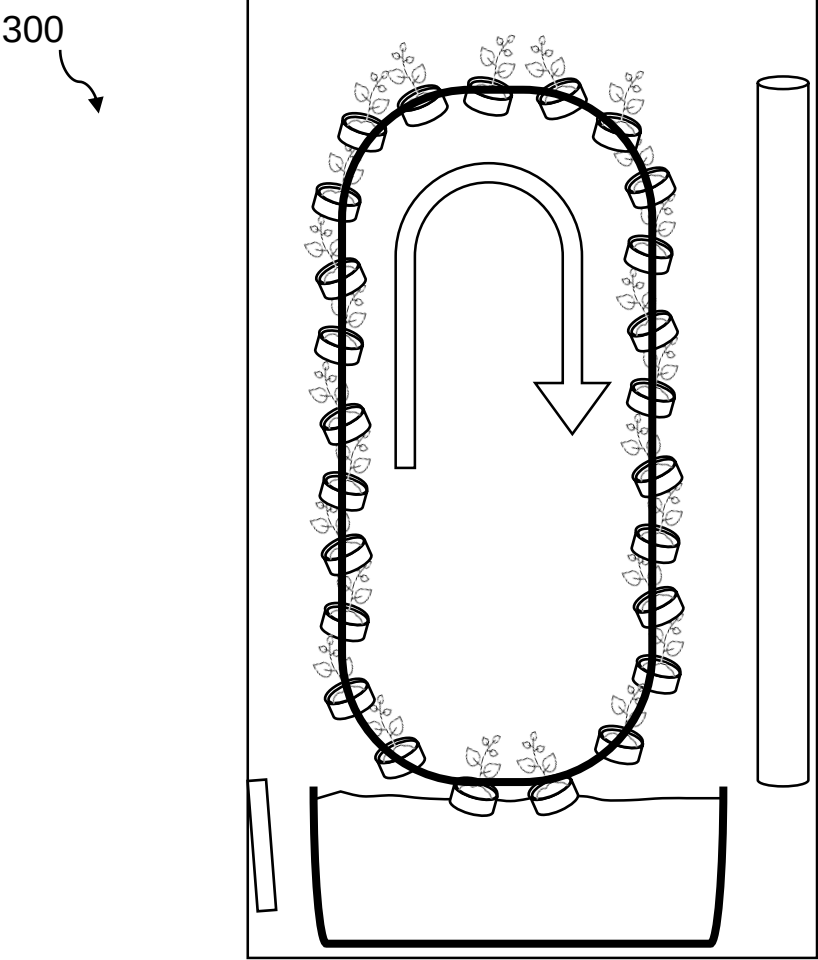


Fig. 7

300

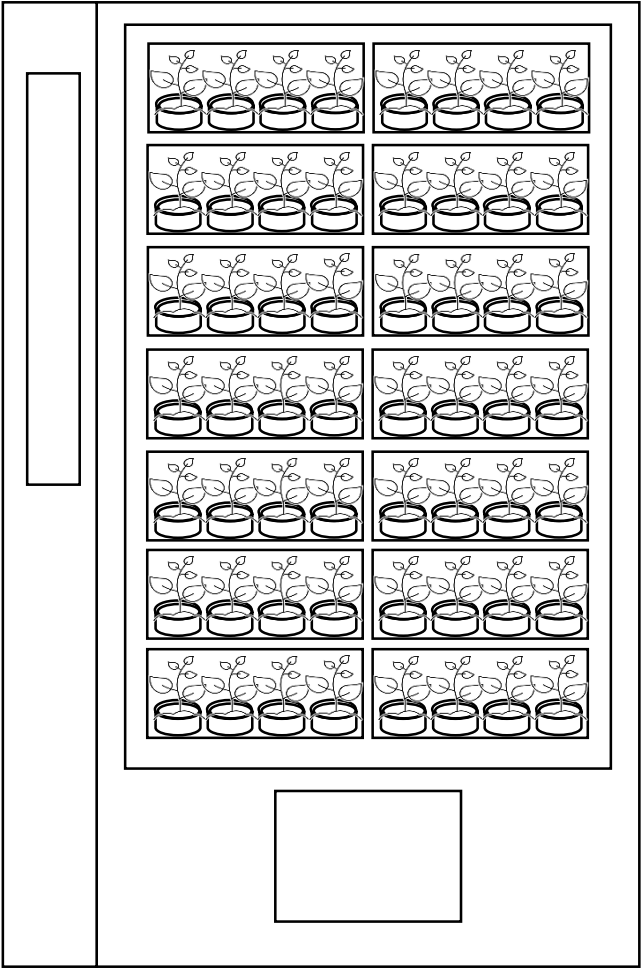


Fig. 8

300

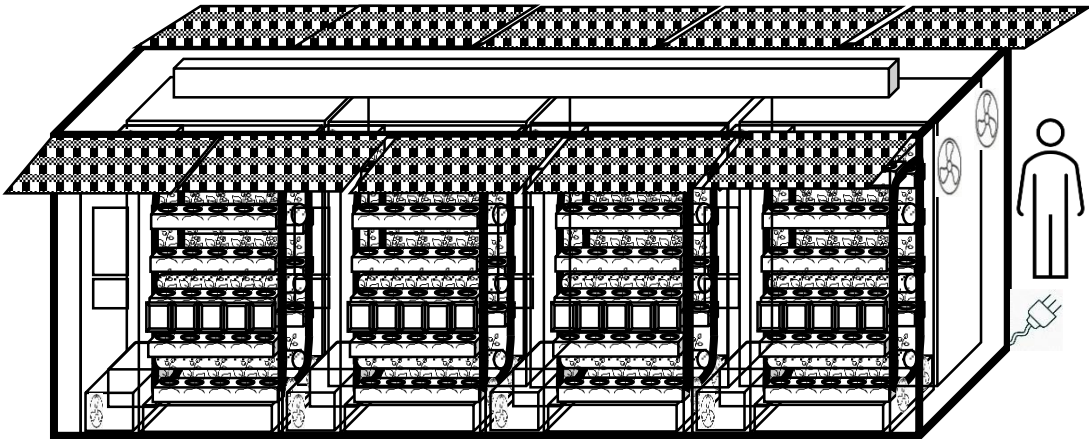


Fig. 9

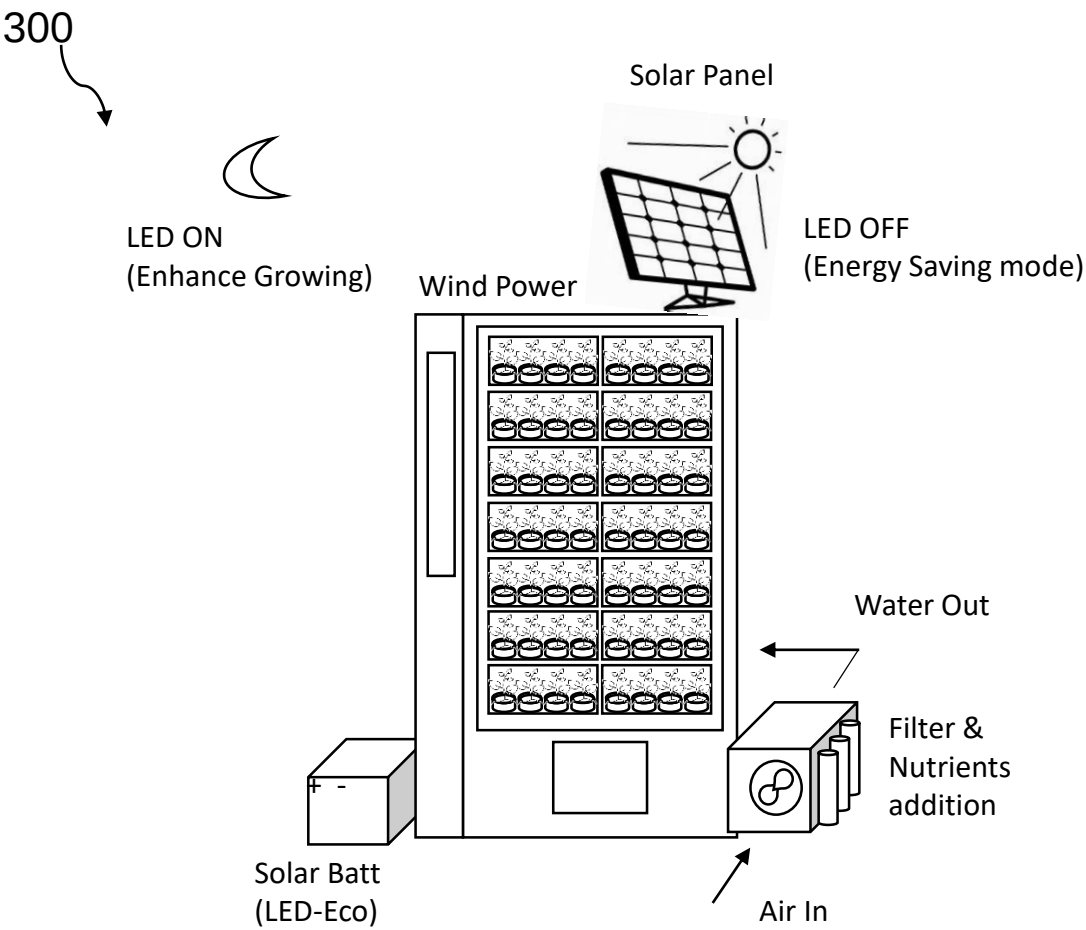


Fig. 10

400

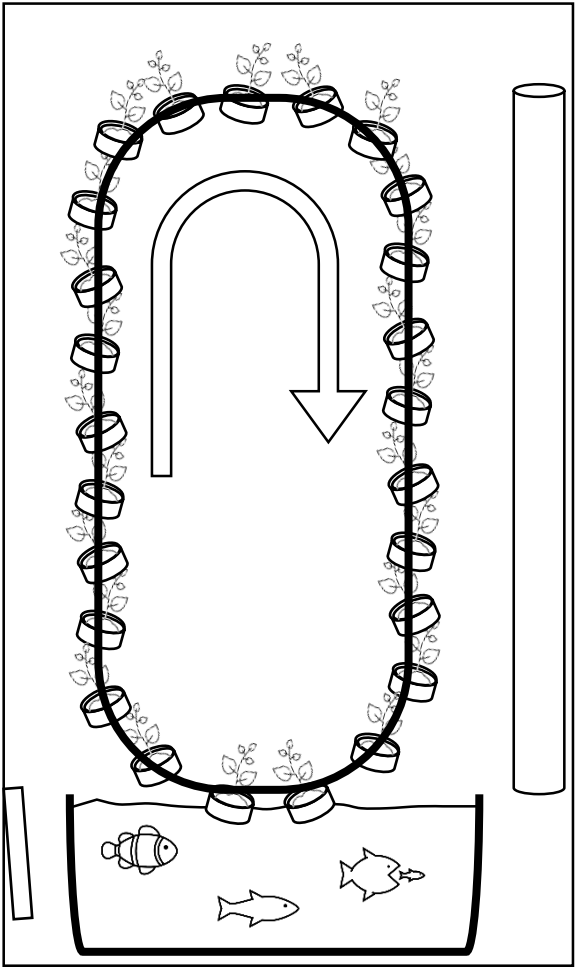
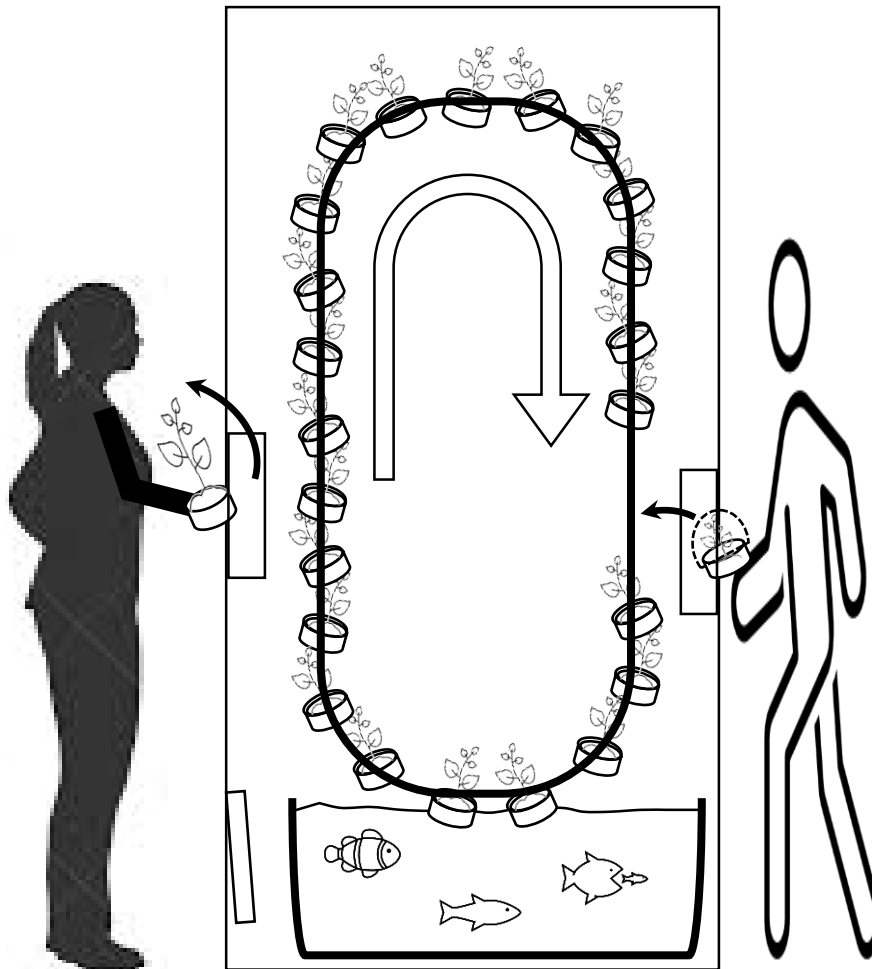


Fig. 11(a)

Purchased

Sterilized removing box to prevent contamination and any possible pest infusion into the vending machine/ Positive airflow , UV light, Ozone injection, pest control system can be inplace (in-situ)

**Replenishment**

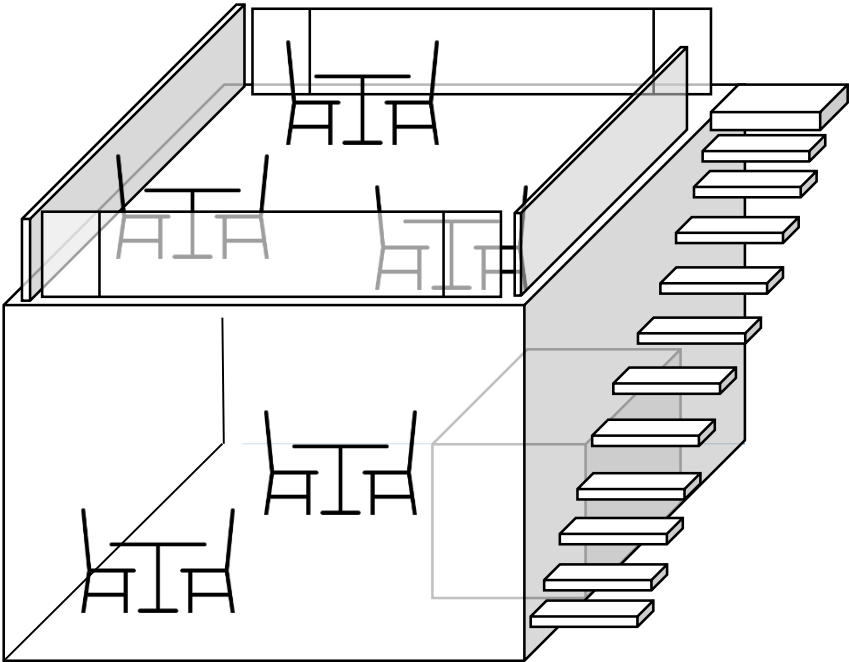
To ensure hygienic & non-contamination loading with proper sterilized loading chamber and pest control especially preventing mosquito infusion.

Seeding plot to be properly cover.

Optionally, plot cover is properly seal and could biodegrade inside the vend machine via light/water/heat/etc

Fig. 11(b)

500



Perspective view of the veg-cafe

Fig. 12

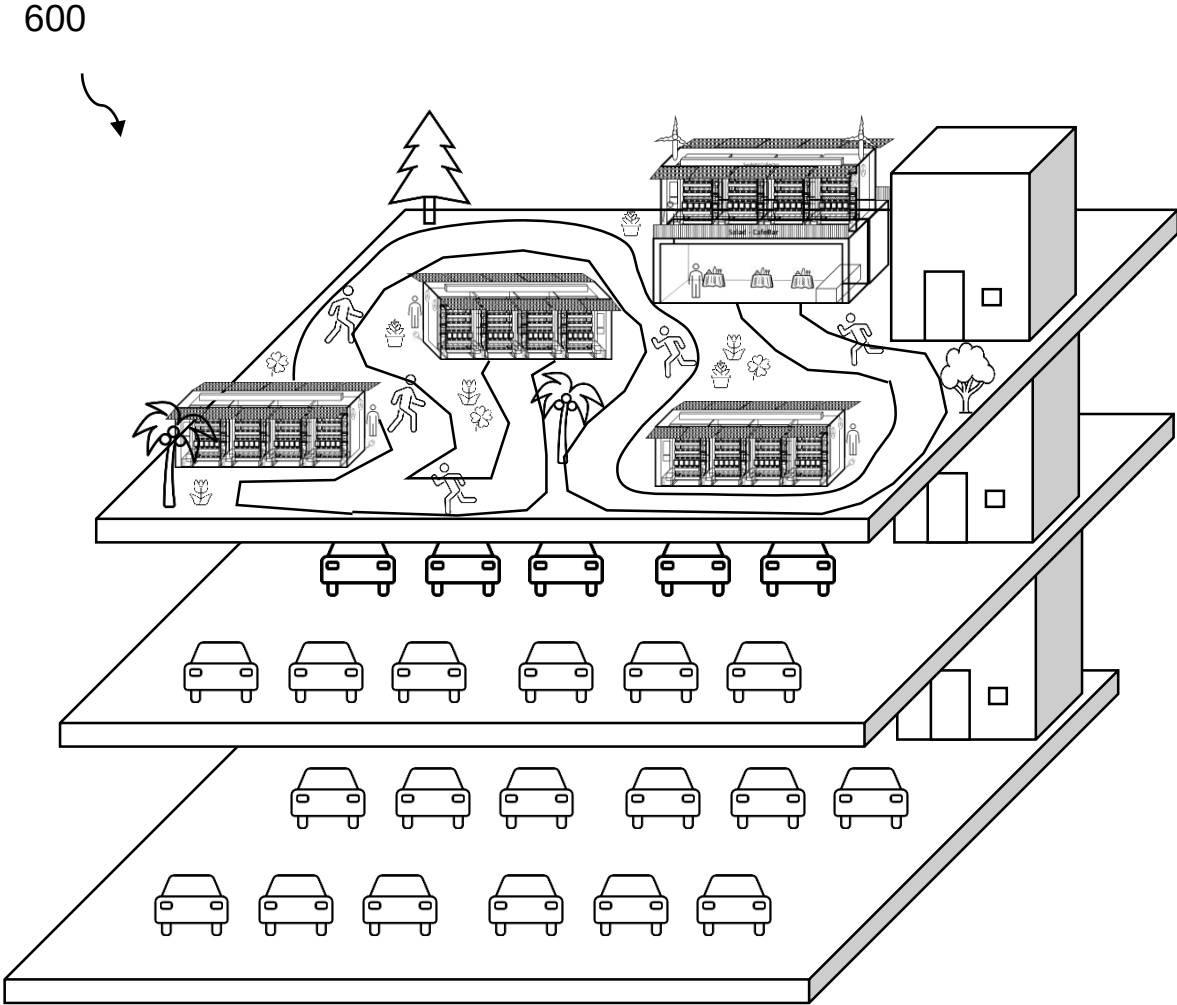
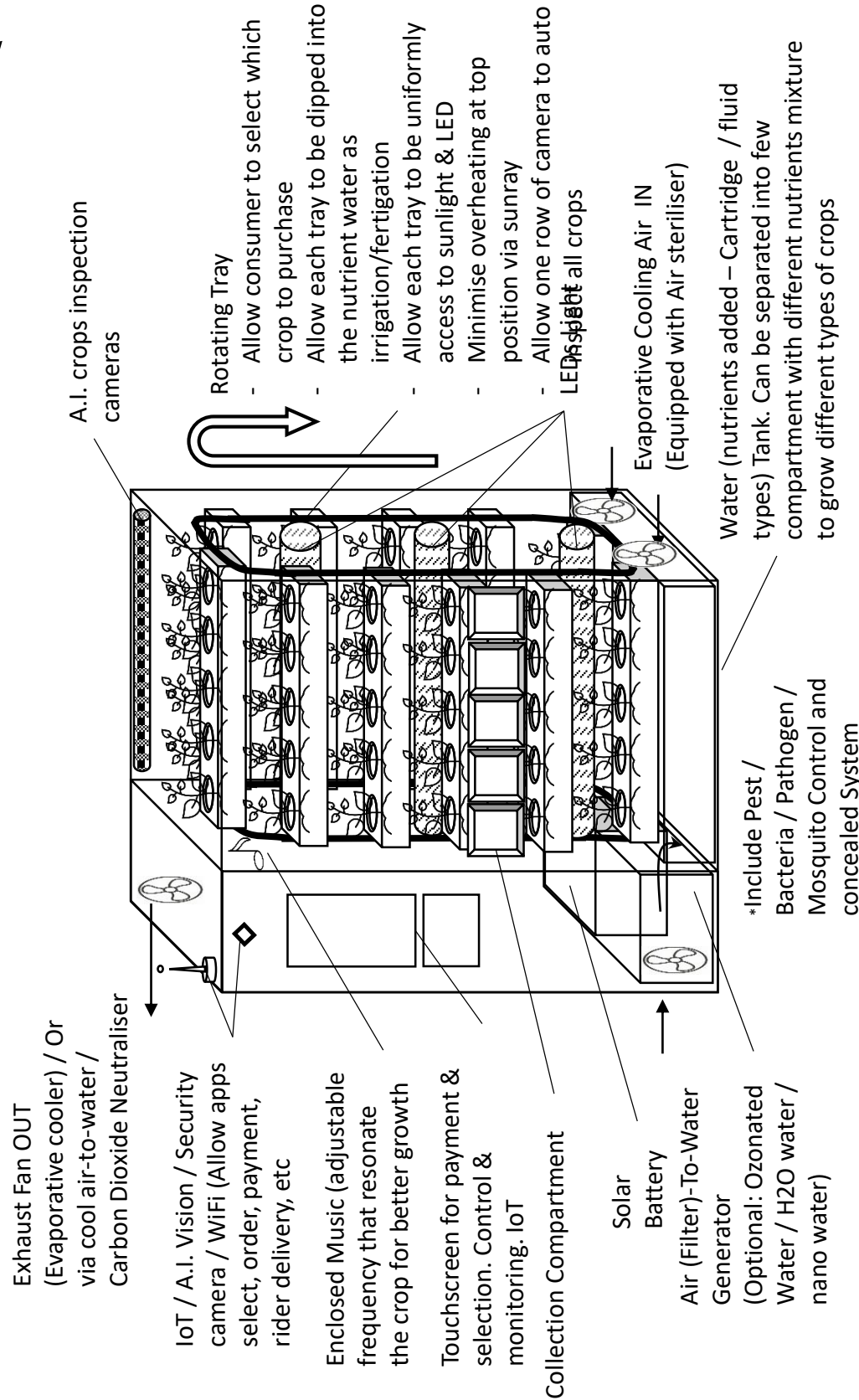


Fig. 13

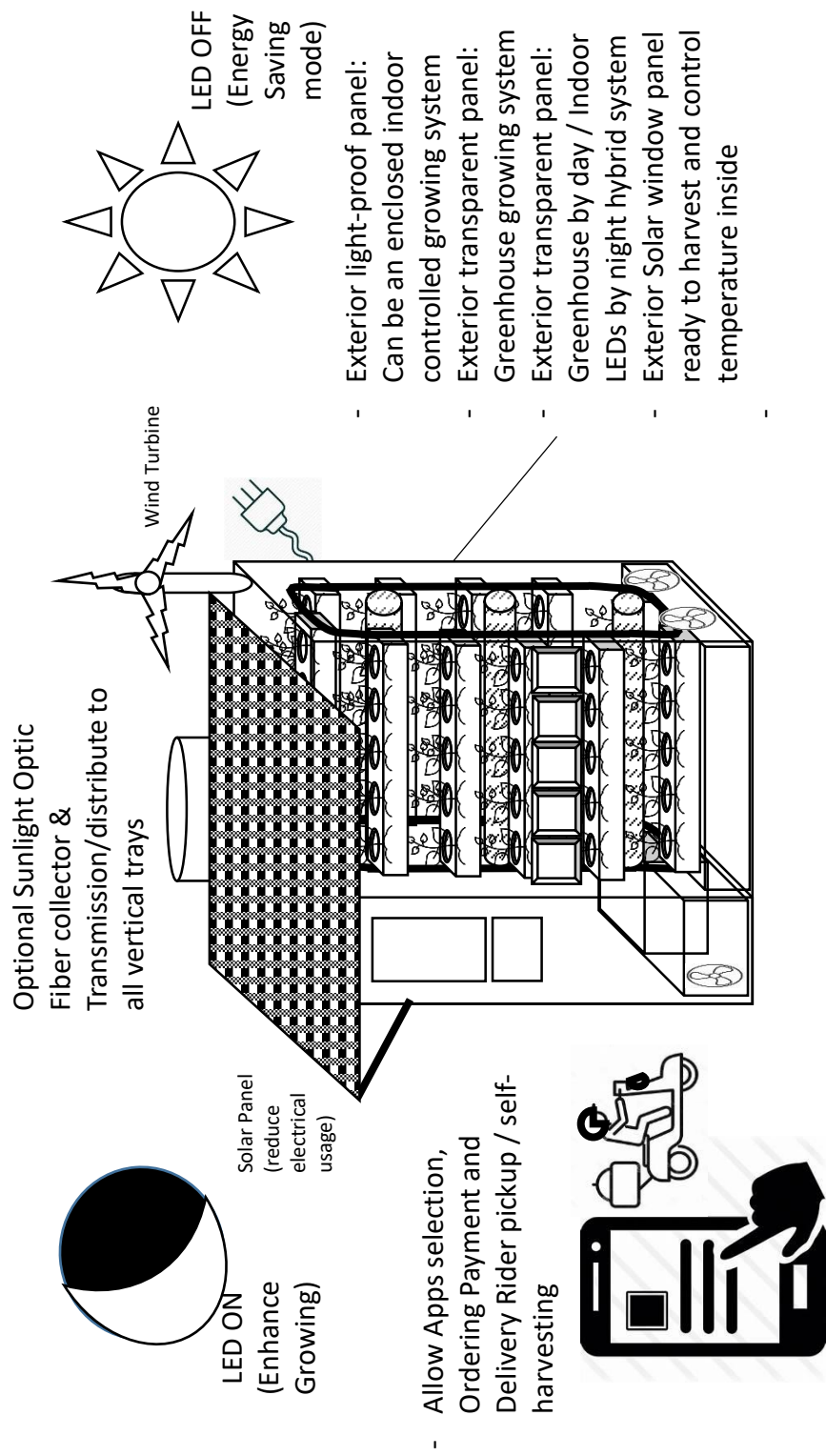
300



An additional figure to the portable vertical farming system 300

Fig. 14

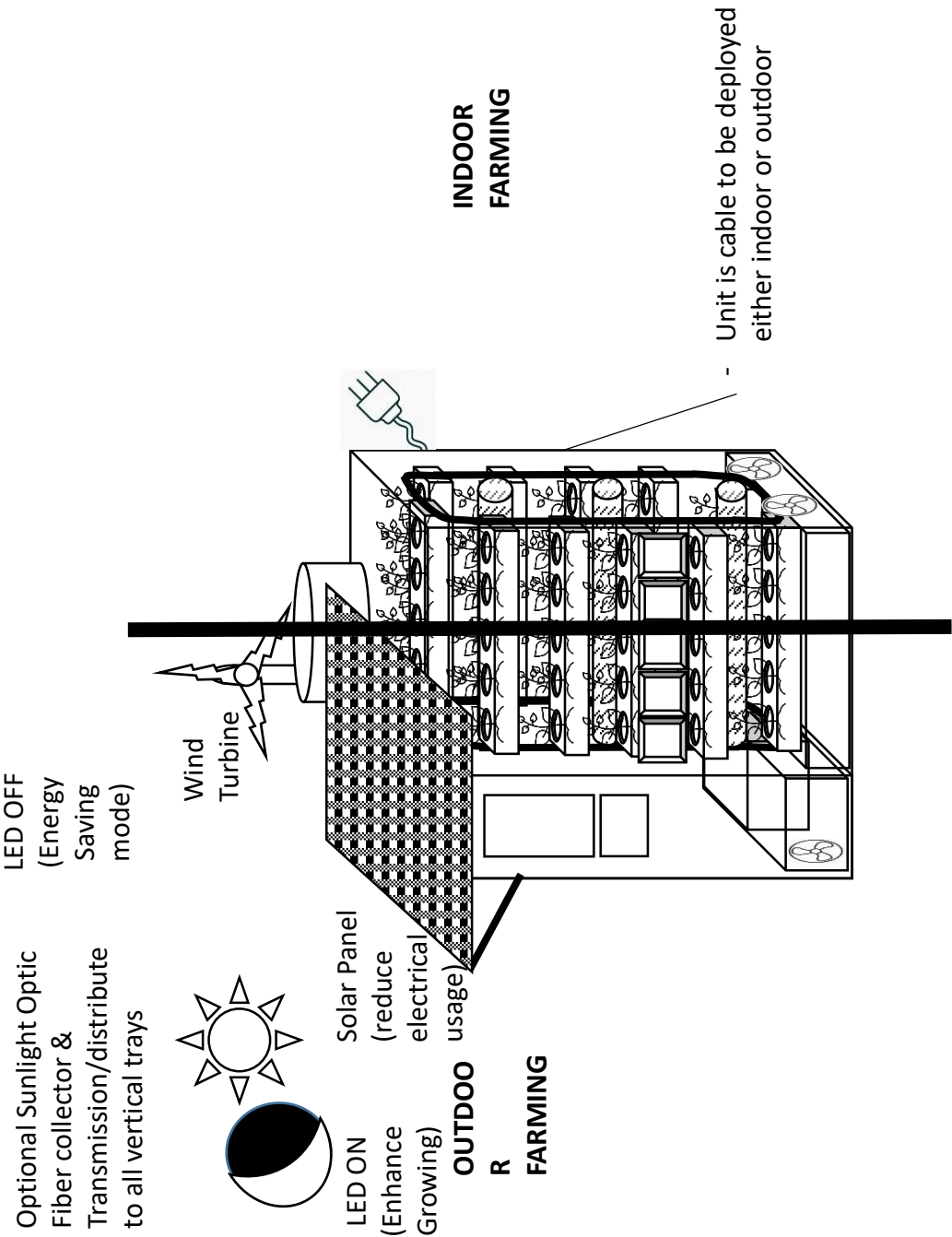
300



An additional figure to the portable vertical farming system 300

Fig. 15

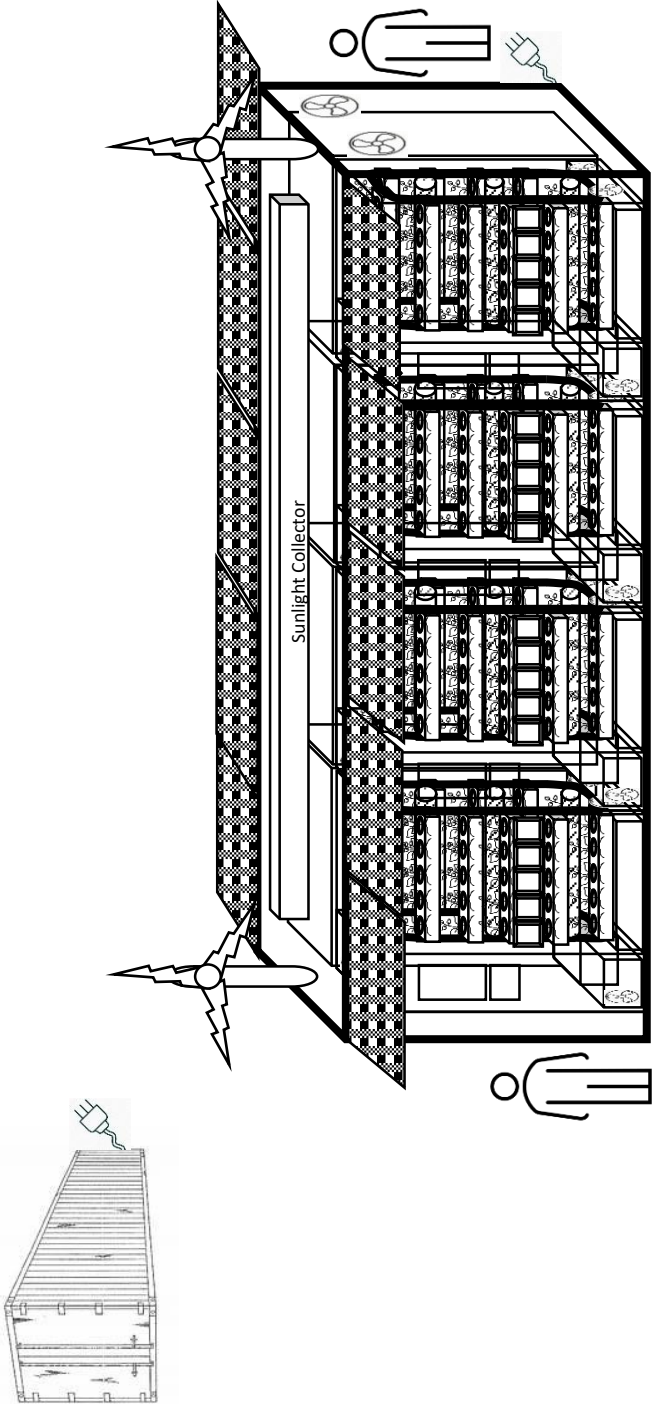
300



An additional figure to the portable vertical farming system 300

Fig. 16

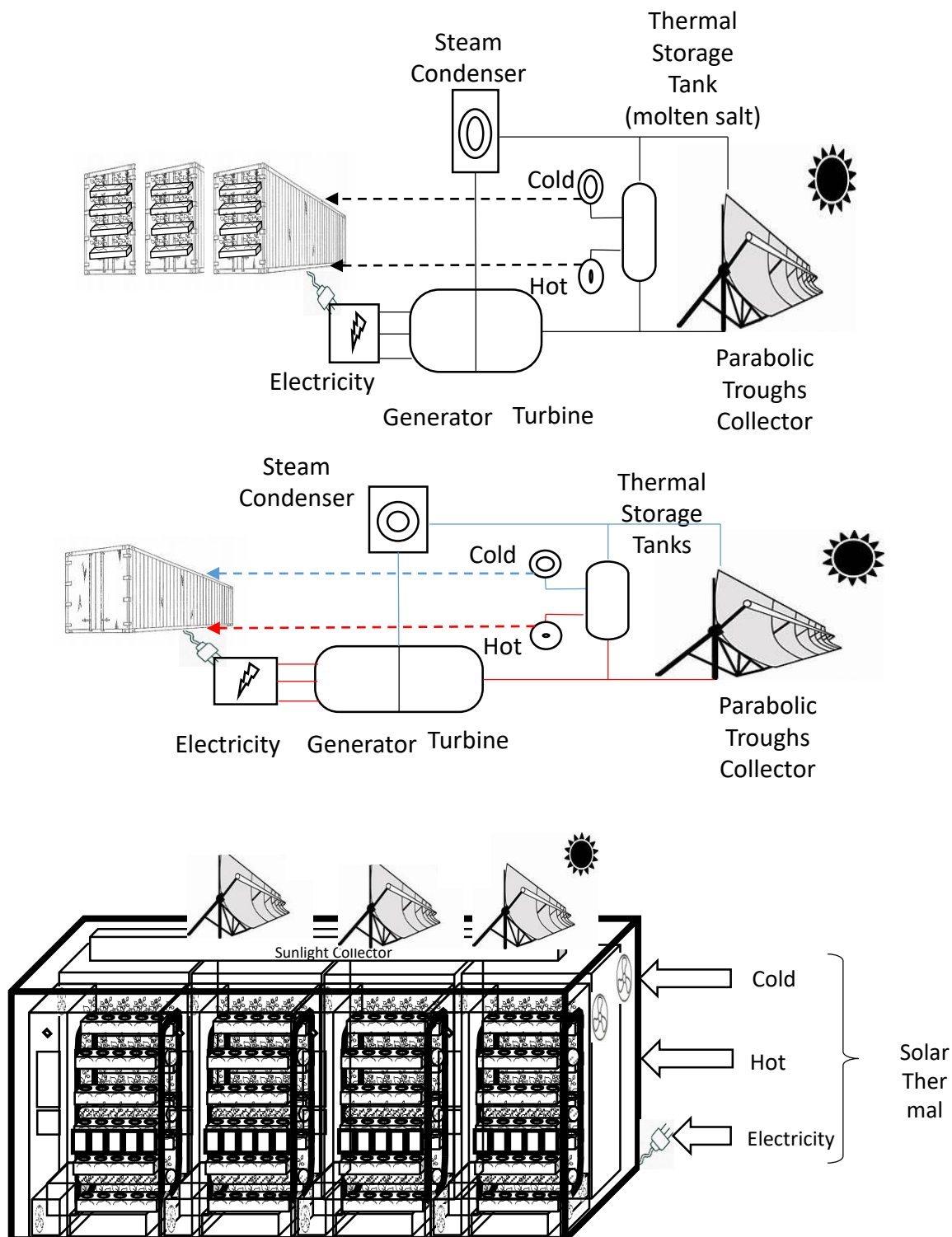
300



An additional figure to the portable vertical farming system 300

Fig. 17(a)

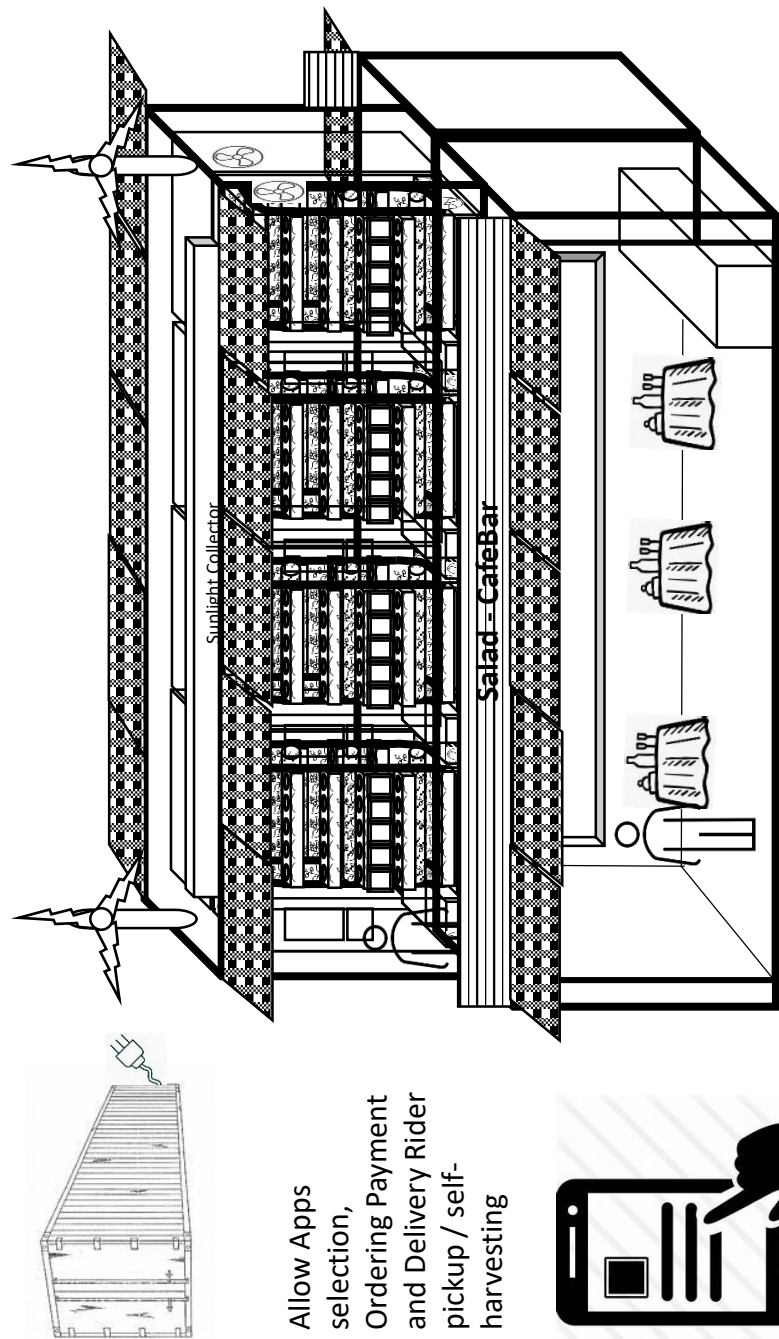
Capitalising on Solar Thermal Energy via molten salt storage system deploying in Vertical farming for it heat (winter or night-time)/cold (summer or daytime) and electrical demands



An additional figure to the portable vertical farming system XXX

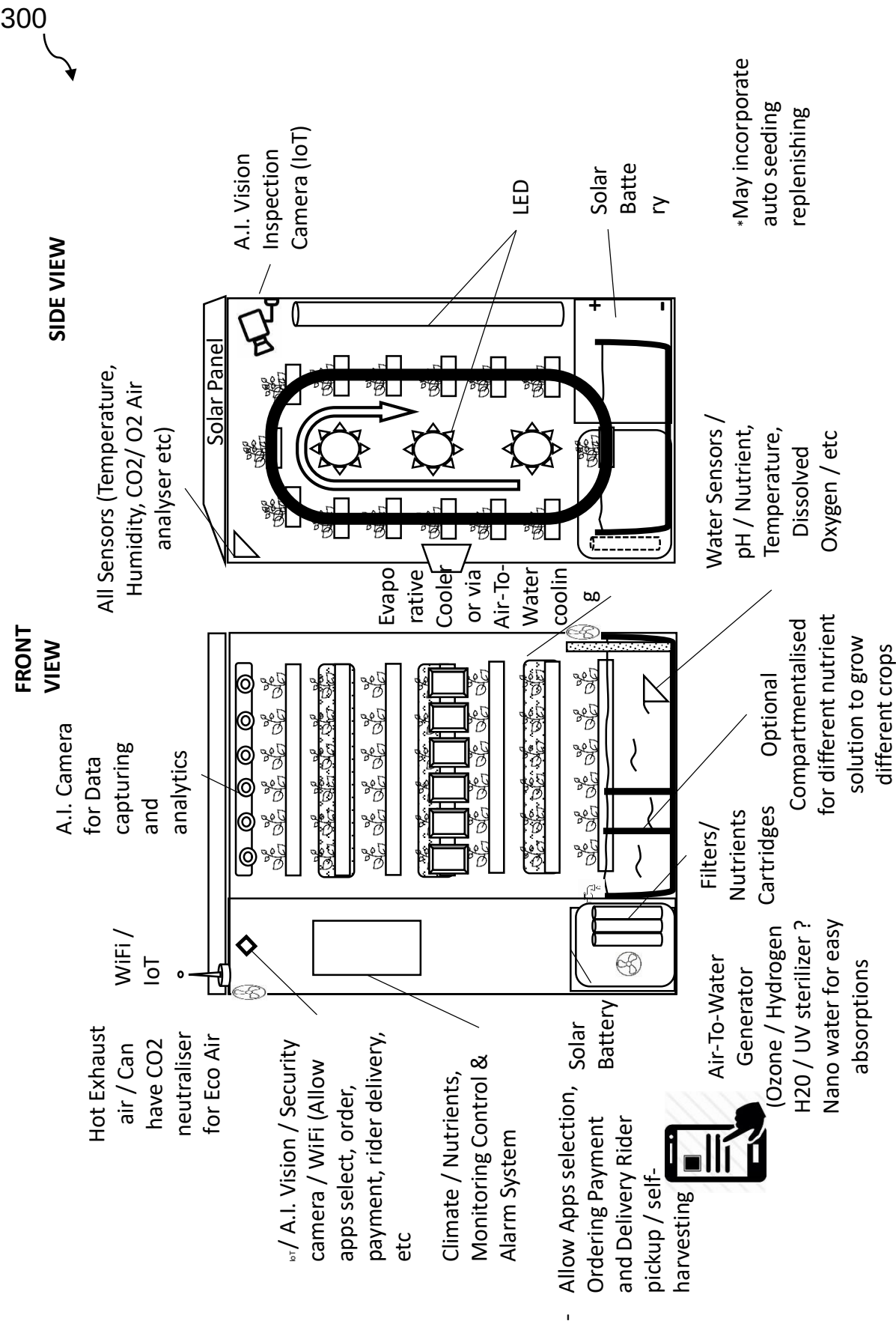
Fig. 17(b)

300



An additional figure to the portable vertical farming system 300

Fig. 18



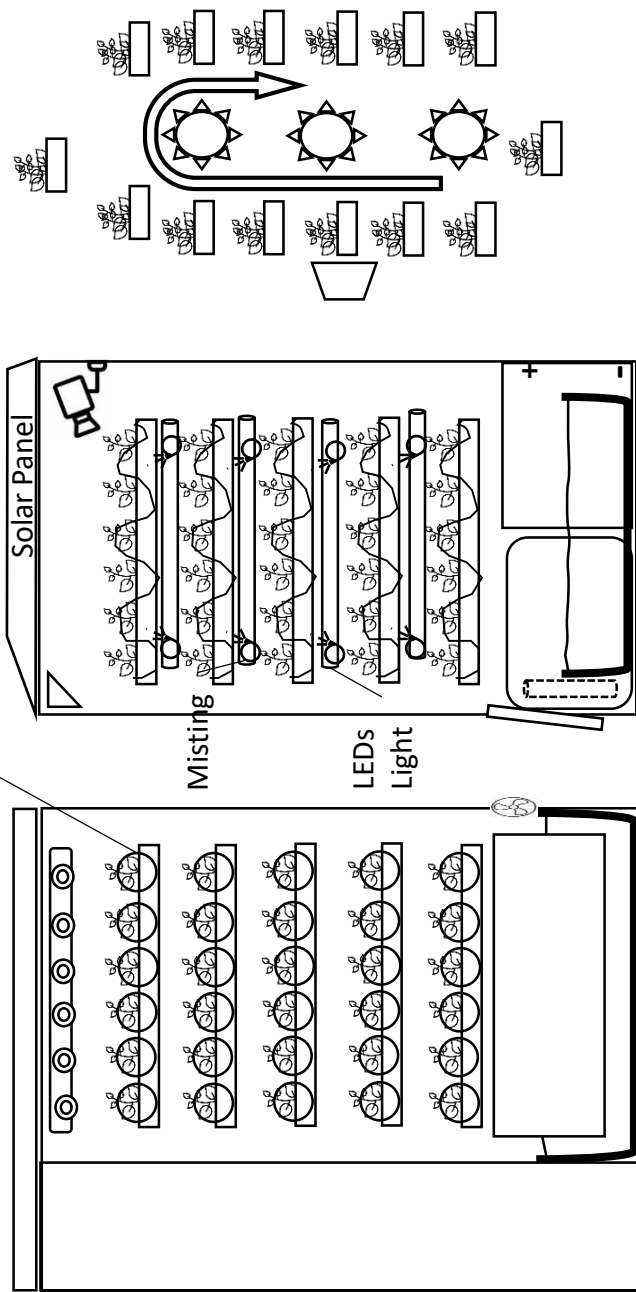
An additional figure to the portable vertical farming system 300

Fig. 19

300



Any
dispensing
for e.g. Coil
Type (similar
to Can drink
dispenser



* May
incorporate
auto seeding
replenishing

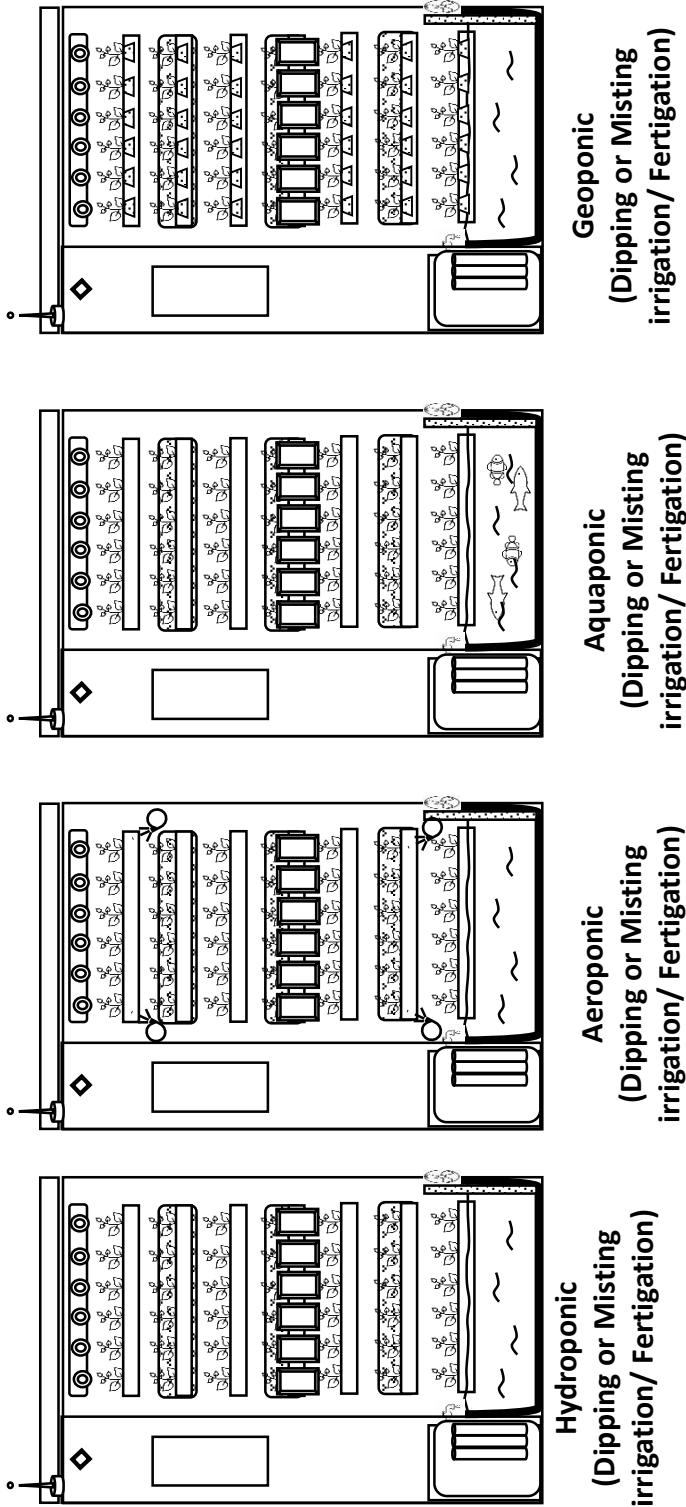
SIDE VIEW

FRONT
VIEW

An additional figure to the portable vertical farming system 300

Fig. 20

300



*Also can combination of 2 or more methods in one unit for more effective growth

An additional figure to the portable vertical farming system 300

Fig. 21