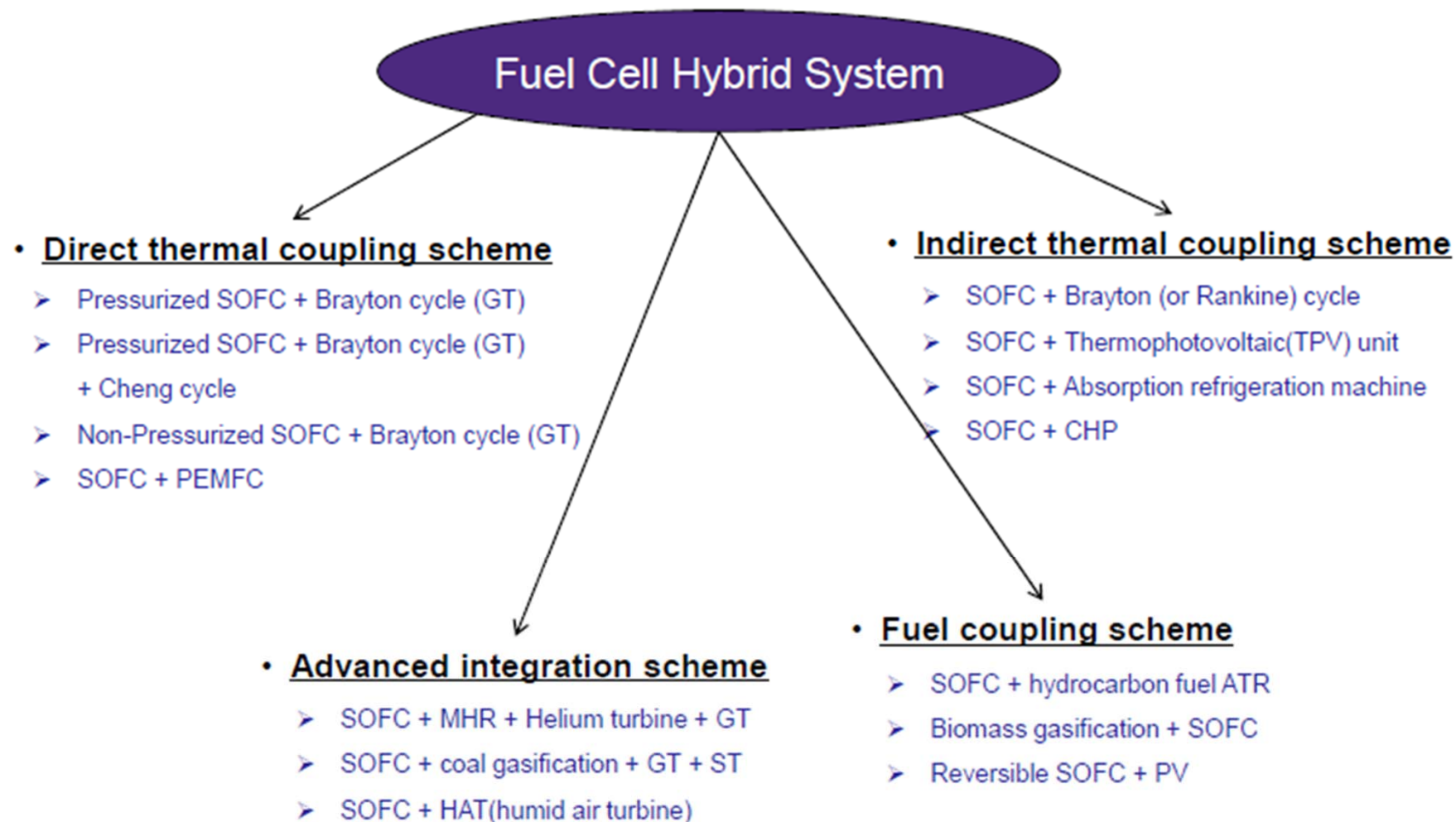


# 연료전지-가스터빈 하이브리드 시스템 개발

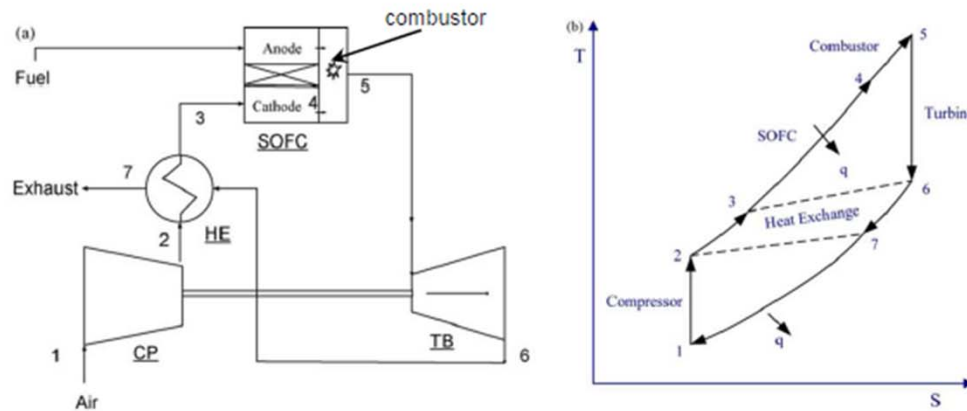
연료전지 하이브리드 시스템 분류(8)

2014. 하반기 IP (8)

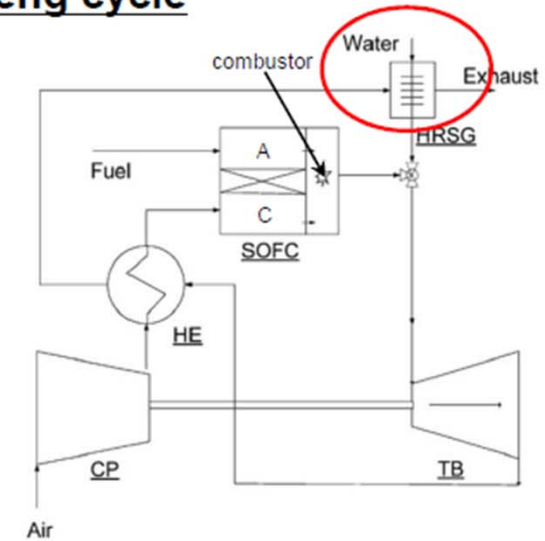


# 연료전지 하이브리드 시스템 : Direct thermal coupling

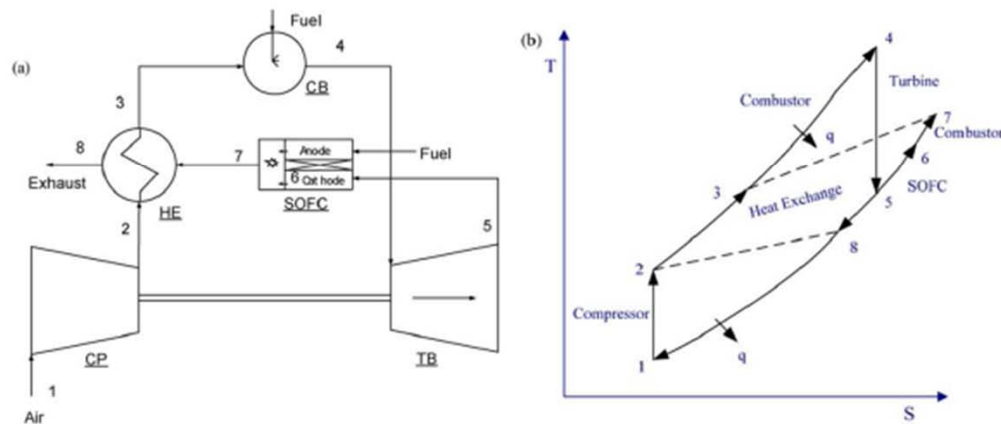
## • Pressurized SOFC + Brayton cycle (GT)



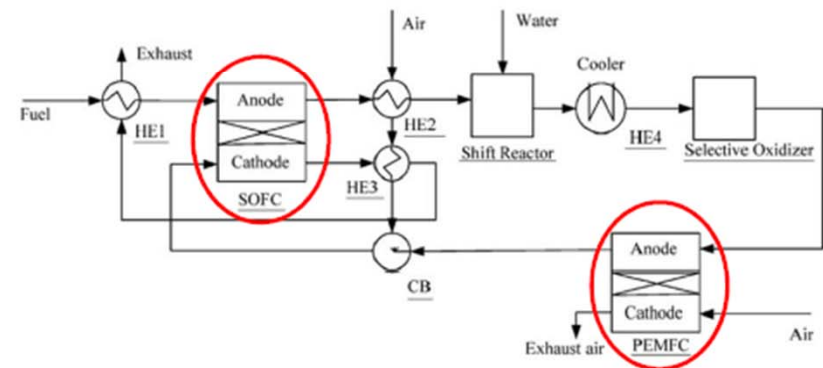
## • Pressurized SOFC + Brayton cycle + Cheng cycle



## • Non-Pressurized SOFC + Brayton cycle (GT)



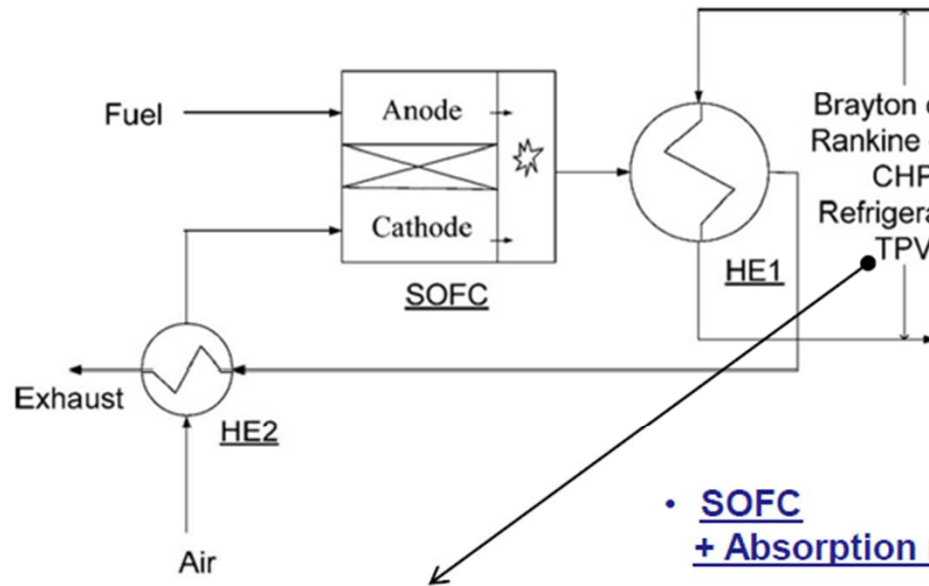
## • SOFC + PEM fuel cell



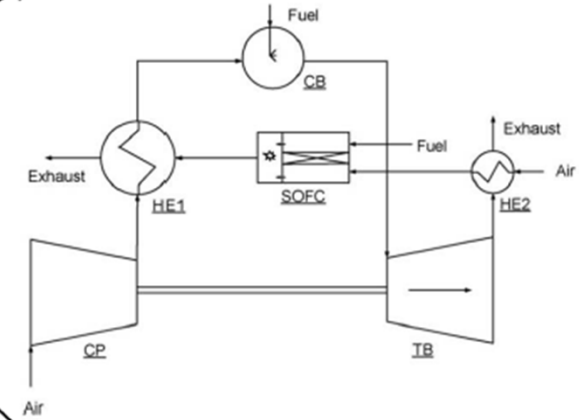


# 연료전지 하이브리드 시스템 : Indirect thermal coupling

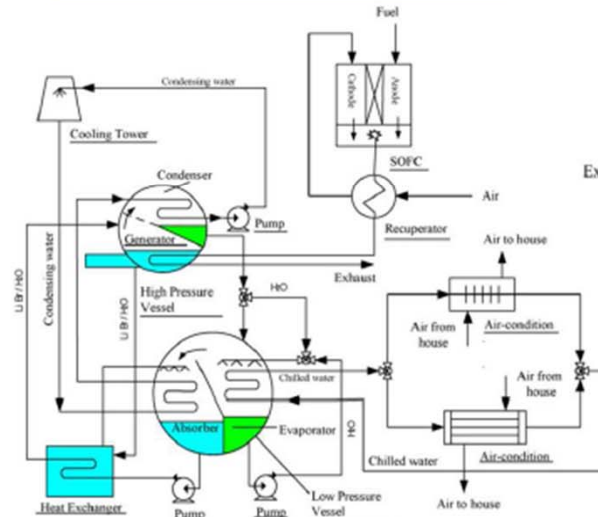
## • Integration of SOFC and heat utilization



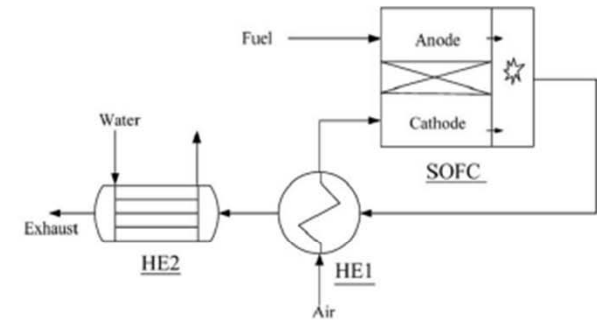
## • SOFC + Brayton cycle (GT)



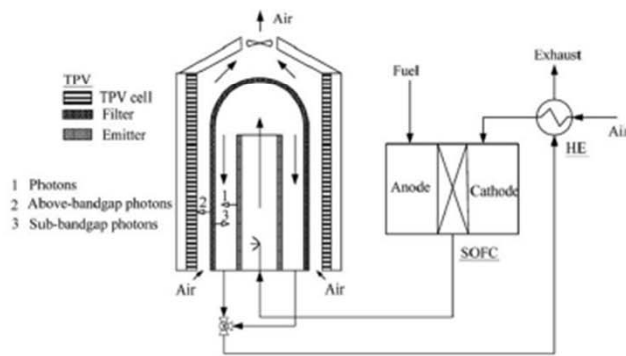
## • SOFC + Absorption refrigeration



## • SOFC + CHP



## • SOFC + Thermophotovoltaic (TPV)



- 1 Photons
- 2 Above-bandgap photons
- 3 Sub-bandgap photons

# 연료전지 하이브리드 시스템 : Advanced concept

- SOFC + Coal gasification + GT + ST

