ConocoPhillips

2nd CACHET Workshop
23 January 2008

SP1-WP5
"Novel Capture Technologies"

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Purpose of SP1-WP5

Since the CACHET Project extends over three years, it is possible that new, high-potential CO2 capture technology concepts or applications for CACHET technologies will appear that would be of interest to CACHET. SP1-WP5, “Novel Capture Technologies,” seeks out and assesses such opportunities through surveys of patents and technical literature from around the world, with a special focus on Russia, AC countries and new member states.

SP1-WP5 Participants (1)

- Air Products
- BP
- ConocoPhillips (COP)
- Chevron Energy Technology Company (ETC)
- Energy Research Center of the Netherlands (ECN)
- EniTecnologie SpA (Eni)
- E.ON UK PLC (EON)

SP1-WP5 Participants (2)

- Institut Francais du Petrole (IFP)
- Meggitt, UK (Heatric)
- Process Design Centre BV (PDC)
- Shell International Renewables BV
- Stiftelsen for indutriell og teknisk forskning ved Norges Tekniske hogskole (Sintef)
- Technical University of Sophia (TUS)

SP1-WP5 Tasks (1)

- **Task 1. Other applications of CACHET technology concepts (COP)**

  CACHET technologies will be assessed with respect to their potential to be used in other H_2 production concepts.

- **Task 2. European regions - Capabilities and relevant technology developments (TUS)**

  Review the pre-combustion decarbonization (PCDC) capabilities in Russia, AC countries and new member states.

SP1-WP5 Tasks (2)

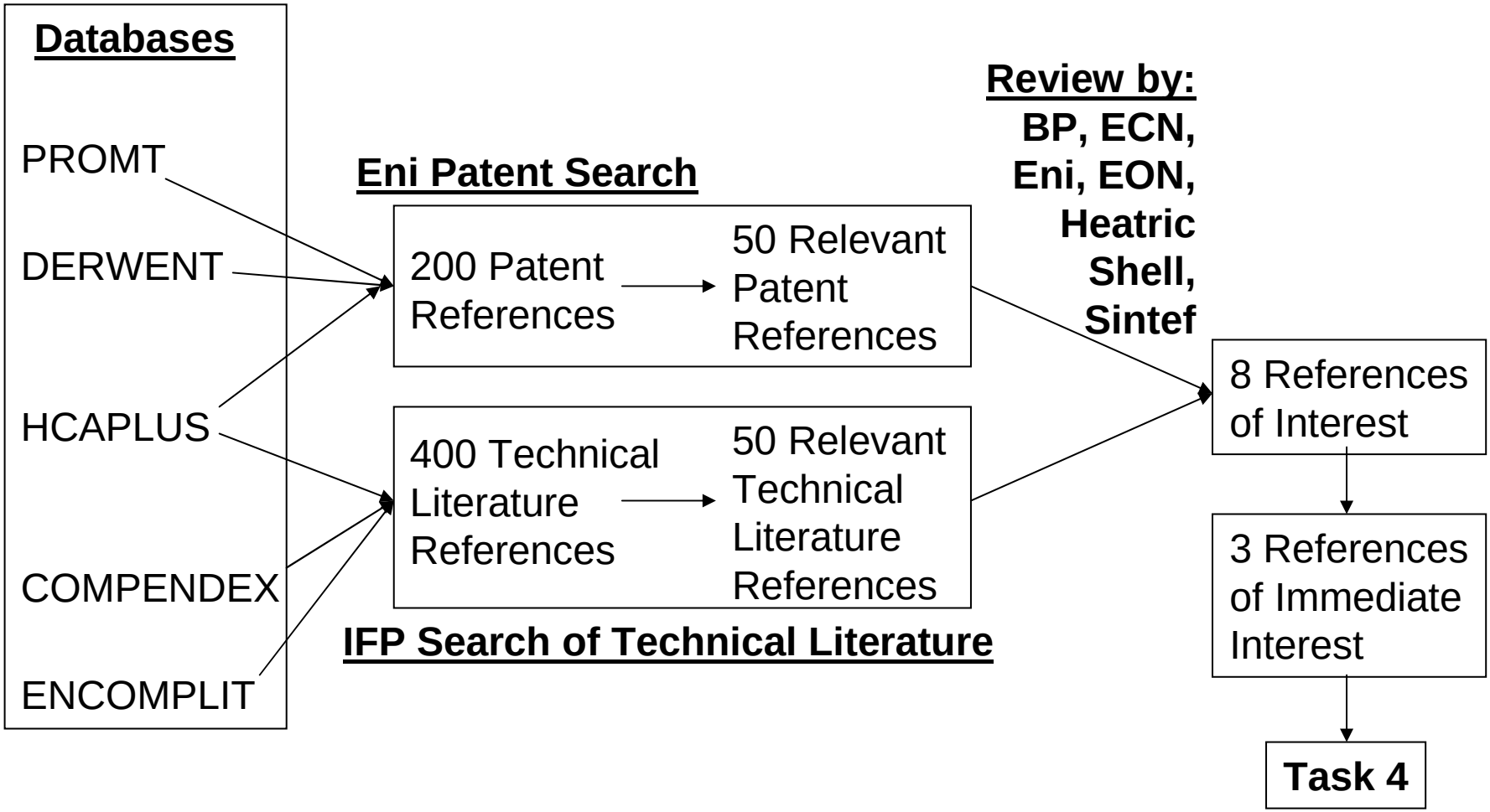
- **Task 3. Literature and patent research awareness (Eni, IFP, BP, ECN, EON, Heatric, Shell, Sintef)**

  Review of relevant technical and patent literature will be performed to identify novel, emerging CO_2 capture technologies worldwide. The focus will be on capture technologies that could be integrated into H_2 productions systems.

- **Task 4. Novel technologies and concept evaluation (PDC, AP, EON, Heatric, Shell, ETC)**

  New technology concepts will be evaluated on a consistent basis to estimate their potential for highly efficient, cost effective PCDC CO_2 capture.

Task 3
Search, Review, Select



Technologies of Immediate Interest

- Sorbent-enhanced reforming
- CO_2 separation membranes
- High-efficiency microchannel reformer technology with CO_2 capture

Task 2 Presentation

Review the Pre-Combustion CO_2 Capture / H_2 Technologies in Eastern Europe

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